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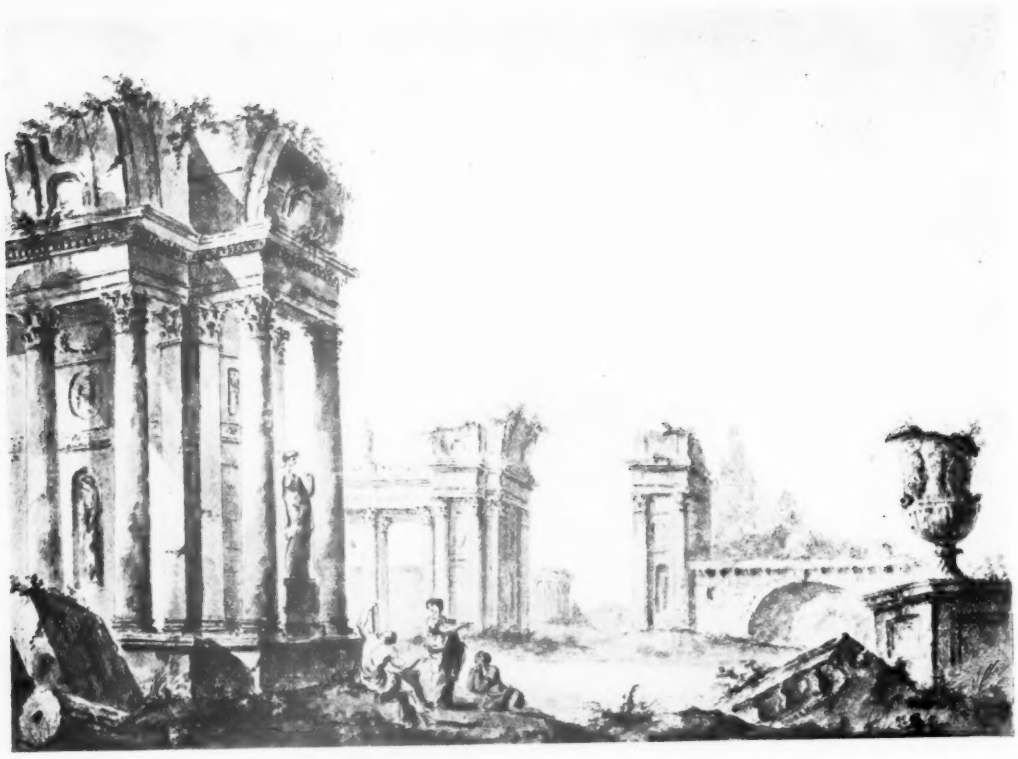
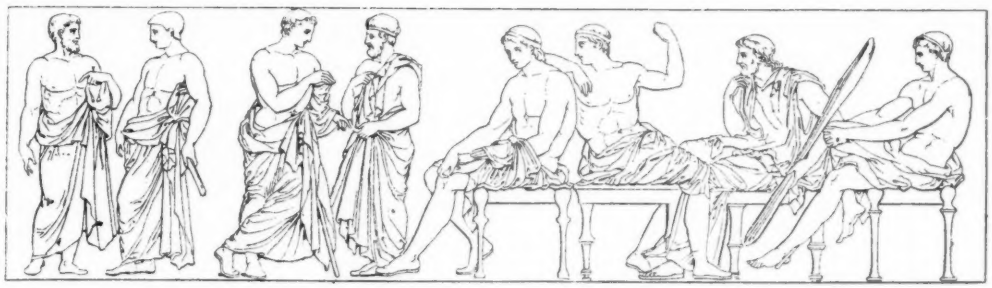


From a Tinted Drawing by G. P. Pannini (1691[?]-1764)
(R.I.B.A. Collection)



The International Congress on Architectural Education

Review of the Handbook of Proceedings

BY THE EARL OF CRAWFORD AND BALCARRES [*Honorary Fellow*]

THOSE who were responsible for the International Congress on Architectural Education, held under the auspices of the Institute, ordained that the readers of papers should be chosen from architects who were not professors in the schools. Perhaps by analogy the Editor of the JOURNAL entrusts the review of the striking record of the Congress to one of the nine Honorary Fellows of the Institute who have had no architectural training at all. The layman, at any rate, often enough the culprit, though sometimes the victim of error, is profoundly concerned in the subject, and I observe with some regret how seldom the need of teaching him was referred to. The volume just issued is a fine record of a remarkable Congress—discussions and debates, exhibitions of work from no less than 52 schools all over the world—survey of the past, scrutiny of the present, aspirations for the future; the whole affair was planned on large lines, organised with excellent judgment, and was happily carried to a successful and memorable issue.

Three central themes were submitted to the Congress, past, present and future education—texts upon which significant and fruitful contributions were based. The past aroused enthusiasm among one group, tempered by cautious fear of precedent by the modernist, and openly condemned here and there by the futurists who distrust the dead hand in teaching and practice alike. And yet there is a constant recurrence of the feeling that, even if we must break away from tradition, the old builders profited by their familiarity with materials. They handled the brick, they studied the craft in its infinite scale of variety; they seem to have maintained a standard of workmanship, and an intimacy with the manual problems of construction. "Building must be the objective of architectural training," so runs the homily of one speaker; at first sight a truism or joke, but in reality a pungent and far-seeing criticism. Another speaker said that the student should begin as a bricklayer or carpenter; again an appeal for study of the instruments with which the artist embodies his conception. We do not expect the sculptor to quarry marble, or the painter to weave canvas, but the architect can least afford to be divorced from the realities of his art.

It would seem that the old system of apprenticehood, which I suppose brought the student into close relations with workaday construction, has now died out, and the passing of a system upon which the triumphs of Mediævalism were founded still causes regret (though I am inclined to suspect the old buildings collapsed rather more often than we know). In its place we have the Schools. Let me take a reasonably insular view of the position. How is this country situated, where do our shortcomings lie, and what remedies are suggested? The U.S.A. has 5,000 students; ours number less than 700, whereas our proportion should be 2,000 or so, or in any case a much larger number than

to-day, even if we consider the smaller scale of our requirement. The merits of the school teaching were well emphasised. The teacher is presumably more eclectic than the practising architect; his province is to watch the student, to study him, and his experience should show him how to detect promise, to correct false tendencies, and to bring out the best of his pupil's personality. The teacher occupies a fiduciary rather than a financial or patronal relation with his pupil, and can combine continuity of purpose with flexibility of method, in a manner one could not expect from some distinguished practitioner with a formed style and a specialised clientele. If therefore the school is to be the recognised avenue to the profession, its development is a subject to which the Institute is wise in giving so much attention. How much more necessary is the school in architecture than in painting or music. The debased picture or the dissonant fugue are easily suppressed: architecture is neither combustible nor pulpable at will; it is a much more serious affair, more lasting, and more widespread. The public should be taught to recognise the fact, the architect should welcome it; for architecture requires discipline, since it is fundamentally the public art in which the public is closely concerned: and the public should realise how deeply it is interested in the genius and personality of the teacher. I note in passing the reluctance of architects to write about architecture of our own day. I always get into trouble about my heterodoxy, but persevere.

We must therefore look upon the school as our educational unit. In this we are less susceptible to French influences than the U.S.A., or other countries which have modelled their training on the École des Beaux Arts. The sanity of the French system, its logic, its heritage of the Bons Sens of the eighteenth century have certainly invested the French method with as much unity of theory and practice, of teacher and builder, as so elaborate an organisation can attain. But one rather questions their wisdom in making all school competitions simultaneous and identical. One does not want too much insistence on *égalité* in the progress of the arts, and yet the French have this advantage over us, in that they look upon their education of the architect as in part the concurrent education of the public. We teach our public about poetry and music, but uncommonly little about architecture. And of course this reacts on the art itself. The mischievous and maddening apathy of those who commission important buildings, the indolence which too often results in the choice of a commonplace rather than a distinguished design—all these misfortunes are debited against the architect, who gets most of the blame, and indeed must bear his share of it, for collectively he has done little to stimulate the science of appreciation among laymen. Does this over-state the case? I fear not.

The school will perhaps do something towards disseminating a better tone among the public, that is to say among potential patrons. To my mind it is satisfactory that so many of these schools should be allied with Universities, for the machine becomes more supple and efficient, the mentality better equipped to grapple with problems which are ancillary to the main function of design and construction. The school, in fact, is gradually merging itself into the wider humanistic province of University life. It has to train men in a variety of problems which no study of the past can solve—new materials and all they connote, the economic conditions of our day which are enhanced by high costs and scarcity of craftsmen, by legal and mechanical complexities, not to mention the intervention of the engineer. In old days he was a military martinet, nowadays he is different, though less remote. But while new materials involve new methods of construction, the central principles of education remain intact, and it is in the development of a few acknowledged principles that progress must be sought.

This volume provides evidence of our vitality at home, of vigorous movement elsewhere. All agree that much has got to be accomplished. Far-reaching issues are at stake. The Congress has assembled the greatest body of thoughtful and stimulating material ever collected on this vital subject. A long contest lies before us, and the full impact of this symposium should be widespread. I wish the book could be translated into French. Meanwhile the Institute has placed the public under an obligation for so cogent a statement of problems in which the public is deeply concerned.

The Old Inns of England*

BY C. J. TAIT [*F.*]

Were there ever such things as the good old days? The question is often asked. Professor Richardson and Mr. Eberlein think quite rightly that there were, or they would surely never have written this book. The road by which we have come is strewn with useful articles that we have cast aside in order that we may win the race, though what the race is for we have not time to think. We have lost our fur, our teeth, and our claws, as Dean Inge reminds us, and while mechanical production has deprived us in great measure of the use of our hands, mathematical formulæ are now seeking to do our thinking work for us.

THE EAGLE YARD, CAMBRIDGE
(*The English Inn, Past and Present*)

The old days were brave days when results were not achieved without effort, nor indeed without adventure, and judged upon their merits they may still command our admiration. They at any rate contained the material from which romances are made. We read with a thrill of Tom Brown's first journey to Rugby. We watch him swallowing down his breakfast in the candle-lighted coffee room of the Peacock Inn, Islington, for the morning is early, and then away upon the Great North Road. We see Mr. Pickwick making the acquaintance of Sam Weller in the yard of the White Hart, Tom Pinch journeying from Salisbury to London, Nicholas Nickleby at Grantham, with its still famous inns, the Angel and the George.

Dickens's descriptions of coaching incidents and coaching inns furnish us with the most convincing historical episodes of the times, and the present authors have not overlooked them. The inn or hostelry is one of the most human of our social institutions. It is the place where the stranger is cared for, according to its original meaning. In no Parliament House was there ever gathered such representatives of the people as collected in the Tabard, when "longen folk to gon on pilgrimages."

It is in story and romance that the inn and its associations are enshrined, and this spirit has been well guarded by Mr. Richardson and Mr. Eberlein. But much information is also given us of historical and antiquarian interest. The development of the inn is sketched from the days when the Church dispensed the duties of magistrates and municipalities. It was a "church house" and the name is still retained at Holne, upon the moor above Ashburton, while portions of the George at St. Albans still mark the period when it was an appanage of the monastery. Dignitaries of the Church saw nothing equivocal in augmenting their receipts by the sale of

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**The English Inn, Past and Present*. By A. E. Richardson and H. D. Eberlein. B. T. Batsford, Ltd.

The Old Inns of Kent. By D. C. Maynard. Philip Allan & Co.

THE FRONT

THE COURTYARD, THE GEORGE, STAMFORD

(The English Inn, Past and Present)

wholesome home-brew. There is a distinction between the ale-house and the inn. The functions of the former were local, but it was the business of the latter to provide a night's rest for the traveller, and thus it became a most important link in the chain of communications. Its ultimate prosperity must have owde much to those great road makers Wade and Macadam, whereby travelling became something of a pleasure as well as a necessity.

The care of the traveller, embodied in the office of host, necessarily extended itself to the care of his beast, which was the charge of the ostler. The term, despite the loss of the initial letter, implies responsibilities similar to those of his master and marks the importance attaching to this function of the hostelry. When saddle-horse, chaise and stage coach were eclipsed by the enterprise of Brunel, the stage inn became at once nothing more than a beer house or closed its doors entirely.

Among the London inns the galleried yard has departed, there being no further use for it. Many examples survived to modern times and will be remembered by some readers. The White Hart in the Borough was standing in the 'eighties and the Bell in Holborn still later. The Angel, the Nag's Head and Mother Red Cap continued to mark stages in the Metropolis, but they were stages traversed by omnibus, not by coach. There was no guard in a red coat armed with a blunderbuss. Yet in a humble way these vehicles carried on custom and tradition. Passengers could still watch the process of changing horses. Seated beside the driver, they could feel a thrill as he gathered up his pair and dashed down the hill from Mount Pleasant and up the other side into Gray's Inn Lane, when it was nothing more than a lane. Coaches continued to run from some railway terminus to outlying centres as they did from Barnstaple to Lynmouth, but there can be none left upon the road now save for the purpose of excursions. The old coaching houses, whence the stages set forth upon their several roads, such as the Bull and Gate, Aldersgate Street, the Saracen's Head on Snow Hill, and the Golden Cross, where Nelson's Column stands, are now but names to conjure with.

The illustrations, which include photographs and reproductions from old prints and drawings, would alone provide an entertainment, while in conjunction with the text we feel that an adequate tribute has been paid to the modes and manners of our predecessors.

THE LEATHER BOTTLE, COBHAM
(*The Old Inns of Kent*)

Professor Richardson's gift of enthusiam is both known and admired. It is a gift that serves him in his search for material and in his manner of presenting it. It serves him not only in regarding the past but also the present, since it enables him to picture the inn still maintaining its position as a social institution, though the amenities of the parlour have been exchanged for those of the lounge, and the grunt of the engine, rather than the sibilations of the ostler, is heard from the yard. And so the book concludes with a list of motor routes which will enable the holiday maker to establish a personal acquaintance with these relics of a bygone time.

Professor Richardson takes to the road with something of the airs of a Claude Duval. Mr. Maynard pursues the

even tenor of his way along Watling Street, or among the hop gardens, upon an ambling pad. He is, of course, actually steering an Austin or some such machine, and the reader must contrive to reconcile the old with the new. He writes an itinerary which will be especially appreciated by the Kentish man. Whether we call the highway Watling Street, or whether we call it the Dover Road, we must recall episodes that are landmarks in our country's history. The news of Agincourt travelled along Watling Street, of Waterloo along the Dover Road. The inns, if not the buildings now standing, must be as old as the roads, and they afford the author ample material for gossip and information. We are, of course, in the immediate environment of Dickens, and we no sooner enter Rochester than we meet Jingle. Must we accept Mr. Maynard's explanation of the sign which identifies Rochester's famous inn? To derive bull from *bulla* as in Papal-bull, while it may suggest ecclesiastical proprietorship, is to break up a happy family. I wonder what the Red Lion, the White Hart and the Spotted Dog have to say about it. The book is illustrated by photographs and pen and ink drawings by the author, which are worthy of better printing than they have received in some instances.

THE RED LION, WINGHAM
(*The Old Inns of Kent*)

The Warping of Wood

BY PROFESSOR A. P. LAURIE

BEING engaged at present in writing a book for artists, I found it necessary to go into the question of the warping of the wood panels on which pictures are painted, and, not finding any very definite information available, devised the following apparatus for testing the amount of warping of panels under different conditions.

The panels were 12 inches each way and I had a tin box made 11½ inches by 11½ inches and 4 inches deep with a broad brass flange attached around the top. I then took a sheet of rubber 14 inches each way, cut out the centre, and cemented the rubber strip on to the edge of the panel, just as one would mount a water-colour picture on to a cardboard mount. The panel with this rubber strip was then laid on the top of the box, another brass flange laid on the rubber and the two flanges pressed together with brass screw clips. The box was thus closed by a lid, the panel, the rubber margin, and the brass flange resembling a picture, mounted on a mount, and surrounded by a frame, and the wood was free to expand, contract, and warp in any direction.

Water was put inside the tin box so that the lower surface of the panel was exposed to air saturated with moisture, while the upper surface was exposed to the air of the room. After exposure for about 24 hours to moisture the panel was taken out, placed on a sheet of plate glass, and the amount of warp that had taken place measured with a steel rule. Readings with a wet and dry bulb thermometer placed above the box showed no very great change in the amount of moisture in the atmosphere during the experiments.

The first experiment was made with a white wood panel supplied by a reputable artist colourman and it may be taken as consisting of what is regarded as properly seasoned wood. The amount of warp amounted to 12 millimetres or approximately half an inch, the thickness of this panel being 5 millimetres.

The next experiment was with a mahogany panel, 3 millimetres thick, cut from a piece of mahogany which had been cut and seasoned for some three years. The amount of warp in this case amounting to 9 millimetres. As this panel was thinner and therefore should have warped more than the white wood panel, this showed superiority of the mahogany over the white wood.

The next experiment was made with a mahogany panel also 3 millimetres thick and cut from an old piece of second-hand mahogany at last twenty years old. The warp in this case only amounted to 5·5 millimetres, showing the superiority of this old mahogany and therefore the length of time that is required for a piece of wood to become thoroughly well seasoned. It is usually stated in the textbooks that the seasoning of wood is merely a matter of the drying out of sap, but I do not think this is all the story. Apparently by long exposure to air the wood cells become less sensitive to change in the moisture of the atmosphere, losing probably their hygroscopic properties.

My third experiment was made with a piece of three-ply wood 5 millimetres thick supplied by the Venesta Company and made from Alder wood. This only warped 2½ millimetres, showing a superiority to even the old mahogany.

These experiments had been made in each case by saturating the under surface of the wood by moisture. It seemed, therefore, interesting to see what would happen when the conditions were reversed, by putting dry calcium chloride inside the box so as to expose the under surface of the panel to dry air. When this experiment was tried on the three-ply panel it warped 5·5 millimetres, showing that, with the balance of moisture which it contained, it was more sensitive to drying than it was to wetting.

The next question which I proceeded to investigate was the relation between the amount of warping and the thickness of the panel. For this purpose I had two other panels cut from the same piece of old mahogany, one 6 millimetres and the other 12 millimetres thick. The amount of warping was 3·5 millimetres and 2·5 millimetres, so that if we arrange these in order we have for the 3 millimetres thick a warp of 5·5; for the 6 millimetres thick a warp of 3·5, and for the 12 millimetres thick a warp of 2·5. It is evident that the thicker the panel the less the warping and the curvature, but it is not inversely proportional to the thickness of the panel. As a first approximation, it is probable that if A is the length of the piece of wood along the grain, B measures the total amount of contraction on one side and expansion on the other of a piece of wood of length A, and C is the thickness of the wood,

R the radius of curvature is $= \dfrac{A}{B}\sqrt{B^2+C^2}$

and that for a thickness C^1, $R^1 = \dfrac{A}{B}\sqrt{B^2+C^{12}}$

so that $$\frac{R}{R^1} = \frac{\sqrt{B^2+C^2}}{\sqrt{B^2+C^{12}}}$$

Consequently the ratio of the radii of curvature for different thicknesses depends on the actual amount of contraction as well as on the thickness of the panel. Assuming that a piece of wood is thoroughly seasoned it is evident that there is much less curvature in a thick panel, which confirms the mediæval practice of using a panel for even small pictures at least 1 inch thick.

Finally, to get a good comparison between ply wood and old mahogany, I tested a birch wood panel from the Venesta Company of 12 millimetres thickness. The warp in this case was only 1 millimetre.

The next question investigated was the protective value of different treatments in order to reduce warping, and for this purpose the white wood panels were used. Saturation of a panel on both sides with a weak solution of resin caused very little improvement. A panel sized and then coated on each side with one coat of Ripolene enamel, only warped 5 millimetres instead of 12 millimetres, showing the protective value of a coat of oil or varnish paint.

An interesting question here arises as to how far a coat of varnish or paint on one side is beneficial, the other side being exposed to moisture. It is quite possible that coating on one side is beneficial as it will tend to cause the wood to get evenly saturated with moisture throughout. Another of the white wood panels was therefore treated with enamel paint on one side only, and the other unprotected side exposed to moisture with the following result, that it warped 8 millimetres instead of 12 millimetres.

The apparatus is obviously capable of improvement. With a view to obtaining exact results a double box should be used so as to expose the one side of the panel to saturated air and the other to dry air, thus getting rid of the error due to the changes in the moisture of the air of the room, and a registering instrument could easily be attached so that the amount of warp could be measured without taking the panel from the double box.

It ought to be possible in an apparatus of this kind and with panels cut to a standard thickness to define the properties of different kinds of wood, and the results obtained by different methods of seasoning, so that when wood is to be used for the panelling of a room or some such similar purpose it could be purchased on a definite specification.

These experiments were carried out to get a little practical information for the artist, and do not pretend to be exhaustive, but the results seem to me of some general interest to architects, and, at any rate, they suggest a method which, if carried out on more exact lines, would, I think, give them very valuable information.

Reviews

OXFORD RENOWNED. *By L. Rice-Oxley. Illustrated by A. B. Knapp-Fisher. Methuen.* 1925.

The quaint title of this book is justified on the title-page by an apt quotation from Shakespeare—

> " I pray you let us satisfy our eyes
> With the memorials and things of fame
> That do renown this city."

The author, a resident son of Oxford, has a nice understanding of the æsthetic value of the buildings which he describes. His appreciation of the Ratcliffe Camera is delightful :

" A great building has, no doubt, a kind of personality —a personality, too, which is not shallow and obvious, but very complex and many-sided. There are times when the Camera does look very comfortable, very domestic, very like a jolly English farmer ; there are times when it assumes enormous grandeur and seems to be, as it were, a presiding genius. But, whatever mood it is in, it is always dignified, never a trace about it of trickery or vulgarity or striving after effect."

Wadham, perhaps the most completely satisfying college in Oxford, is sympathetically dealt with by Mr. Rice-Oxley. He tells us that mediæval tradition was strictly followed in the lay-out of this early seventeenth-century building, and that, therefore, the Warden's rooms were placed over the entrance gateway. They were soon moved elsewhere, as was the case in every other college, with the exception of New College. After the Warden's lodgings at Wadham were moved to the north-west corner of the quadrangle, Sir Christopher Wren occupied the room with the oriel window over the gateway.

Mr. Rice-Oxley has a kindly word for the majority of the recent buildings in Oxford : and, in a footnote to his description of the east end of Beaumont Street—that war zone of the Battle of the Styles—he says that nowadays, " whatever be the faults of modern work, architects serve art rather than archæology and do not waste their powers in a ridiculous conflict of styles."

It is forty years ago since Dean Burgon preached a sermon in New College Chapel, which was afterwards printed, largely circulated and dedicated to " The Mothers of England." This sermon laid down the axiom that " to educate young women like young men and with young men, is a thing inexpedient and immodest." A great many things have happened since then ; and, among them, some very pleasant buildings have arisen for the women's colleges at Oxford. But one thing has not happened as chronicled by Mr. Rice-Oxley—usually so accurate in his designation of buildings to their respective architects—Mr. Basil Champneys did not design Girton College, Cambridge.

Buildings are not the only things treated of in this admirable guide to the enjoyment of the treasures of Oxford. The water-colour drawings of the Ashmolean Museum—perhaps the best collection outside London —are especially noticed, and many people will agree with the author when he says that he would rather have one of Turner's early water-colours than a hundred of his later.

There are some good stories about old Oxford worthies, and Max Beerbohm's description of the railway station as the last enchantment of the Middle Age in Oxford is duly recorded.

The book is illustrated by a dozen reproductions in colour, and by others in monotone from drawings by Mr. A. B. Knapp-Fisher. A photograph of Edward Pierce's bust of Sir Christopher Wren in the Ashmolean Museum is included, as is also a monotone reproduction of Peter de Wint's spacious view of " Oxford from the West," which belongs to the Delegates of the Oxford University Press. Mr. Knapp-Fisher's illustrations, always well drawn, sedate and delightfully composed, are perhaps most successful in his simpler subjects. Such a drawing as " The Jolly Farmers," with its pattern of roofs and chimneys and its low connecting shadow, is entirely satisfactory. But in the more elaborate subjects, such as " Magdalen Tower and Bridge," or " Brasenose College quadrangle and the Radcliffe Camera," he seems to fail in getting his planes aright.

The more distant buildings are as fully " detailed " as those in the foreground, and appear to the eye to be of equal importance and weight. Some allowance must be made for the effect of colour translation, which is inevitable in the reproduction of a water colour by mechanical means. Yet the monotones are more attractive and have none of the effect of flatness possessed by some of the coloured plates. The drawing of Wadham College from the garden is a good example of Mr. Knapp-Fisher's sensitive drawing and happy composition.

SYDNEY D. KITSON [*F.*].

CONSETT URBAN DISTRICT COUNCIL. *Preliminary Report on Internal Improvement Scheme. By R. Hardy-Syms, F.S.I., M.S.A.*

It is generally admitted that town planning legislation in this country has up to the present been sadly deficient on two vital matters, namely, in the provision of powers for local authorities to plan built up areas, and in restricting the obligation to prepare town planning schemes only to those towns that possess 20,000 or more inhabitants. By the time that any community has reached this size, we usually find that much damage has been done, opportunities have been missed, and vested interests are strong enough to resist any civic improvements that may entail change of values.

It is interesting, therefore, to hear of a reconstruction scheme that is being carried out independently of the Act by a small industrial town of only 13,000 inhabitants—interesting, moreover, from the fact that the very core of this small town will be remodelled on generous lines to the extent that a civic centre, a market place, and an efficient system of arteries will take the place of a dreary area of mean dwellings.

The town of Consett, which is the magnetic centre of the mining communities in the north-west of the county of Durham, came into being when the Derwent Iron Company began to work ironstone in 1841. The story of its haphazard growth is a repetition of what happened in so many other spots during the industrial revolution; but, happily not too late, expert advice on its future development was obtained, and Mr. Hardy-Syms was called in as consultant; his preliminary report on an internal improvement scheme is the result. In it he diagnoses the ailments from which this little town suffers, points out the various malformations and strangled arteries that are the cause of its disease, and he outlines his proposals for an admirable reconstruction scheme, with a full knowledge of the limitations of the town's finances.

As Mr. Hardy-Syms has devoted much time to the study of road construction and arterial systems in general, it follows that his recommendations for the reorganization of the traffic plan of Consett should be the most valuable part of his report. Mindful, too, of the anticipated increase in public and private motor vehicles, he has tackled the problem of parking spaces with imagination and on an adequate scale; and his proposed layout of the new market place follows the best traditions of old provincial towns. " Through " traffic has been excluded from the market, which is conveniently adjacent to the busy traffic junction and civic centre, and the ground levels throughout the scheme are very carefully considered. One might, however, suggest that in the final report the author should suppress one of the two competitive domes that divide one's interest between two public buildings, and which thus destroy the unity of the composition. The market place would also gain in dignity by the omission of setbacks in the flanking building. It is also questionable whether tree planting on busy pavements within twelve feet of shop fronts is altogether desirable. As the author was only called in to advise on the central portion of the town, no reference is made to the reservation of a surrounding belt for agriculture and playing fields; this will be an obviously desirable feature, in view of the town's rapid growth, and it could no doubt be acquired now by the Council at very little cost and as a commercial proposition.

The Report is well illustrated by fourteen photographs and clearly drawn diagrams, and the town of Consett is to be congratulated on the acquisition of such an excellent preliminary plan on which to work, and on the courage it shows in taking prompt steps to put that plan into execution. W. HARDING THOMPSON [*A.*].

Correspondence

"THE ARCHITECT AND HIS WORK."

50 *Cookridge Street, Leeds.*
12 *February* 1926.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—" The Architect and his Work " pamphlet meets a real need.

In a general way an architect can send this to his client with his compliments, and so inform him of the correct procedure in building operations.

There is, however, only one flaw in it, in my humble opinion, which I think should be obviated in further editions —namely, the *inconsistency* of the commission fees, pages 15 and 16. I refer to the sliding scale below £2,000. This is as it ought to be, but might be made more forcible, by the reason for it being stated. The reading and argument goes well, as far as where the architect " saves his employer £1,000"—by his skill.

Let it stop there; we do not want a sliding scale on works over £5,000 to £20,000 or more, but to be consistent we ought to expect it, and many clients will exact it—because "it is reasonable in a general way."—Yours faithfully,

W. H. HERBERT MARTEN [*L.*].

THE LIBRARY.

OSTMARKBAUTEN. Statebau in einer Mittelstadt von Martin Kiessling. 4to. Stuttgart, 1925. 9s. 6d. [Julius Hoffmann.]

This book deals with modern housing in the neighbourhood of Frankfurt, and touches on all its aspects from layout to detail. Its most interesting illustrations are certainly those of architectural detail, which include some of intricate animal capitals, and some of doors, up the jambs of which crawl thin plastic plants. It is well presented and derives a distinctive appearance from the fact that some of its photographs are covered with a strong brilliance curiously like Dutch painting. I. M. C.

Some Problems in the Construction of Buildings Considered Experimentally

DISCUSSION ON PROFESSOR E. G. COKER'S PAPER (*See* JOURNAL, 6 *February*, pp. 209-225)
(MR. ARTHUR KEEN IN THE CHAIR)

Professor E. G. COKER explained that the origin of his lecture was due to the extension of the buildings in which the gathering had met. These buildings (a part of University College) were extended about four years ago, and as they were erected on an old foundation, a good many problems arose which seemed of interest and had to be settled as they came along. He then resolved that as soon as opportunity occurred he would try and solve some of those problems for his own information, especially as they seemed to be of scientific interest, if not of practical importance. It was difficult, however, to make experiments on buildings themselves because the apparatus required was so large and the loads which had to be put upon the brickwork and masonry so tremendous. He therefore considered the question of some other way of working out the stresses for any particular load, and to this end used models of celluloid or other transparent material and subjected them to various compressions to show by means of polarised light the conditions of stress which developed. He illustrated by means of a projection polariscope how, as the load increased, the colour of the object as shown on the screen altered in the prismatic sequence, first to white, then to yellow, red, purple, and finally blue, denoting stresses of varying severity, which are followed by other sequences denoting stresses of still greater magnitude, each of which can be interpreted in numerical measure by comparison with a loaded tension or compression member.

In order to obtain these effects it was necessary to use light which vibrated in one particular plane. Ordinary light vibrated perpendicularly to the line of propagation, but in all directions around that line. If a prism were taken which would cause light to vibrate in a single plane an undulating wave was obtained which, when it penetrated any piece of transparent material, passed through it just like ordinary light. When, however, a load was applied to the material, the light broke into two wave systems, one vibrating in a direction along and the other in a direction perpendicular to the principal stress. This light emerged as a two-wave system, and in proportion to the magnitude of the stresses there was a certain lag in their relation to one another. Two waves of light in planes at right angles would have no effect upon each other, and therefore it was necessary to obtain interference by the interposition of another prism, which had the property of selecting components of these two waves in its own principal plane. The result was that the two waves which finally struggled through were in the same plane, in which case they could interfere with one another, and, on account of the lag between them, they gave on the screen a colour effect which denotes stress difference. Information as to the direction of the stress was obtained by noticing the dark bands which moved round with the axial turning of the prism. These marked the places where the directions of principal stress were the same as the principal plane of the prism, thereby furnishing a map of the directions.

The lecturer proceeded to give various examples, which he illustrated by experiments with polarised light and by diagrammatic slides. He showed in the first instance a model of a monolitic wall and worked out the directions and magnitudes of the stresses, in the region which included the footings. The more precise measurement of the stress distribution at particular points was given on the diagrammatic slides (without the help of which it is difficult to give any intelligible idea of the various examples). The stresses were measured on many different sections and the distributions obtained were shown. The effect of projections and of their subsequent removal was exhibited. It was also pointed out how maximum stress occurred at the junction of the wall with the footing; the stress at the junction was more than twice, nearly three times, the normal stress. Longitudinal stresses measured along the centre of the wall showed that the normal stress gradually changed to a smaller amount at the footings wall, accompanied by a variable cross stress in the region of the change of cross section. Of special interest was the tracing of stresses in cases in which one was obliged to put the footing on one side only, but the lecturer explained that owing to experimental conditions this particular work was not so closely in accord with ordinary practice as in other cases.

He dealt also with the question of openings in the walls, and the tracing of the consequential stresses. Here again, owing to the conditions of the experiment, he could not use perfectly square corners, because on placing a load on them the stresses in the corners mounted up so considerably that the material became quite plastic; therefore he had rounded the corners to ease the stress and make it measurable, and, of course, this condition did not correspond to practice. He then illustrated the stress distribution resulting from a single square hole on the vertical wall. An interesting point here was that at the central cross section there was a variable compression stress with very little cross stress, so that in the case of a wall of not very great width the stress was simply a straight line following practically the straight-line law. One got with two window openings a rather more complicated pattern, and again he showed the lines of principal stresses in this arrangement and the curve of distribution. The colour values once more gave a very good picture of what was really happening.

The next question of considerable interest was that of cornices, and the effect of cornices upon stresses. It was a very interesting circumstance that if one had a wall in which there was a discontinuity of this kind, the intensity

of stress in that wall was very much greater just at the face. Where, for architectural reasons, a projection was made, that projection caused a very considerable increase of stress in the face of the wall. He showed some curves obtained by his assistant, Miss Harris, all of which had been proved to be of a very considerable order of accuracy. At the top face there was a very considerable stress, and the measurements were repeated almost exactly in the bottom face, although the projection was very unsymmetrical. The curves showed that practically any cornice, no matter of what shape, would give much the same distribution, and at about 1,500 pounds per square inch average load one would get about 2,700 pounds per square inch at the outer faces of the joints both at top and bottom as he indicated. The reason for this high intensity of stress was, he thought, quite clear. If one had an ordinary rectangular block with plane faces and it was loaded top and bottom, the block would be shortened equally all over, but with a projecting cornice the shortening of the block must necessarily be uneven and this caused an increase of stress on certain parts and especially at the face of the wall. At the conclusion of his lecture Professor Coker showed coloured lantern slides of the various models which he had prepared in case the experiments with the polarised light proved unsuccessful, but none of these were actually required.

Mr. W. E. VERNON CROMPTON [*F.*]: I do not think I have ever attended a lecture which has opened up a wider range of thought. I feel that I have attended a kind of post-graduate lecture, and having used that expression I may say that I have often thought that we as architects have been backward in this matter of post-graduate education. After we have passed our examinations and have got into practice it never occurs to us to continue our studies in a serious and methodical way. It is the rarest thing to hear of any architects coming to a lecture like this in order to keep themselves in touch with what, for instance, the engineers are doing.

It is more and more necessary for us architects to keep in touch with engineers. Our civilisation is getting increasingly more complex, and it is becoming more difficult for us as architects to deal with the problems which are continually arising in respect of building construction. We can only tackle them by going hand in hand with the engineers, and asking them to help us with their specialised knowledge. But it is essential for us not to leave the matter entirely in the hands of the engineers, otherwise we ourselves will be in their hands! We must, generally speaking, know how things are going so that we may keep control, as the architect should, of the whole of the work in connection with his profession.

As I was looking at the slides this evening, Professor Richardson, who was sitting next to me, remarked how valuable all this would be in connection with the work at St. Paul's. I think that was a very illuminating remark. I really do think that we have something here which may in its further developments assist such work as is being carried on at Wren's Cathedral.

Coming to smaller matters which are under our own observation from day to day, it struck me again and again how these coloured slides throw new light upon the various defects that we are continually coming across in the buildings upon which we have to advise and report, especially in such cases as those in which we find not only the usual crack in the window sill, but also the crack at the bottom of the jamb. It has often puzzled me why there should be a crack at the bottom of the jamb just above the window-sill. I think we have had it explained to us this evening.

This lecture puts us architects in somewhat of a difficulty. It seems to me that in order to design our buildings with the greatest safety and accuracy we have got to do without external and without internal angles! I do not know how this may be brought about, but in view of future developments in reinforced concrete—which is only yet in its infancy—it is really a question whether the arrangement of lines which we have had suggested to us this evening is not probably a wise thing for us to consider.

One further point—a point of criticism. I was surprised, in the example of the cornices, to see that there was a slight stress at the joints at the top and bottom. I should like that explained, because if the joints were in definite contact it seems to me the stress would be transferred without diminution or change, and yet as far as I interpreted the coloured slide there was a diminution of stress just at the joints, both in the stone above and in the stone below.

It is with unusual pleasure that I move the vote of thanks to Professor Coker.

Dr. OSCAR FABER [*Honorary Associate*]: I have very great pleasure in seconding the vote of thanks to Professor Coker for what has obviously been a lecture of the very greatest interest to all of us. I think perhaps we do not always realise to what extent progress is dependent on the work of the laboratory. Some of us have a kind of feeling that so long as we do enough work in actual practice we shall get to know a lot about any subject which our work covers. That is true up to a point, but the factor of safety which we have to employ in actual practice, necessary as that factor is, has the unfortunate effect of obscuring the scientific points which underlie what I may call the experiments. We put up a certain wall with a certain footing, and we find that the wall carries its load perfectly safely, and we are satisfied. We never really know whether the factor of safety on the wall is four or whether it is forty, and therefore we may make considerable errors in our calculations. It is really only in the laboratory that we are in a position to make experiments in such a way as to tell us something definite.

Professor Coker has evolved one ingenious method of making such experiments. I have also been fortunate in having a laboratory at my disposal where I have made experiments. I have rather chosen the other method of making test specimens and testing them structurally, and thus learning very accurately the present stresses of the materials I was employing. By measuring very accurately the load at which a particular structure failed I was able to arrive at a more or less exact idea of what the actual stresses were in a structure of very complicated shape. I would like to say that, apart from the very great interest of these experiments, architects, I think, are often disposed to imagine that they have a monopoly of beauty in this world; but the experiments we have seen this afternoon show that the scientist's work is also filled with beauty;

it may not be a beauty of quite the same kind, but nevertheless it is a very real and dominating beauty. One can well imagine the zest with which a man, carrying on these experiments, would continue them entirely for the intrinsic beauty of the work he is doing.

The lecturer mentioned the curious point that if you vary the section of a member carrying stress by a projection containing a sharp angle the stress in that angle will be infinite. That is a very curious point. It is perfectly true, of course, and it is a thing that can quite easily be demonstrated by very simple mathematical treatment. But I think practical people are entitled to draw certain conclusions from that. If the stress with a projection at a definitely sharp angle is infinite in that corner, and yet this member does not fail—for, of course, the structure does not fail—then the question arises, if you round that corner to a certain definite radius and you get a stress which now is by no means infinite but is very much greater than the ordinary stress, does it definitely follow that that high stress is dangerous? The infinitely high stress is proved by everyday practice not to be dangerous. Does it follow that the other stress also is dangerous?

Personally I think that these experiments do suffer from a particular defect which, I believe, applies to this method of testing, particularly when used in connection with brittle materials such as we commonly employ in our practice. To make these experiments it is necessary that you make your model of a transparent material, and I believe the material Professor Coker uses is a kind of celluloid. Celluloid has substantially the same strength in tension and compression. But the materials which we use have a compressive strength of approximately ten times the tensile strength. When you get anywhere near conditions of failure that fact alters the distribution of stresses very markedly indeed. If you take an ordinary plane concrete beam, for example, and calculate the load it ought to carry when you know its tensile stress and compressive stress you will find in practice that it will carry two or three times that load owing to the change in the distribution of stress that takes place due, again, to the great difference between the tensile and compressive stresses. You cannot make accurate experiments on the brittle materials we use in practice without taking that factor into account, and the particular specimens used in these tests do not take it into account.

Then, again, when you are dealing with structures consisting of hard blocks and softer joints, other problems arise. Take a footing of ordinary brickwork. The footing is not one monolithic structure. You are dealing with definite bricks laid in definite joints, and the yield you get in your joint does to a large extent do away with that large stress which you get in the angle. I would rather put this question in other words: if you have a definite wall, say a 14-inch wall, which would safely carry, for example, 30 tons per square foot, Professor Coker has shown that at the bottom there may be two or three times the normal stress of the footing; but can we imagine that the wall actually in practice would be very much weaker at the footing than it would be higher up? In other words, if you build a certain piece of wall 14 inches thick, and you put it into your testing machine, do you think that if you provided that wall in your testing machine with a footing it would fail at a smaller load?

That is the point I had in mind when I mentioned before that there is another method of testing these things which in some respects is superior. Personally I do not think that the wall, if provided with a footing, would fail at any smaller load. I had a very curious experience once with a concrete structure which produced a crack that I found great difficulty in explaining, but it is explained entirely by this question of projection. It was a case of a concrete pillar which had a bracket built on to it, on this bracket was resting a concrete beam, and there was an expansion joint. The beam was provided with a casting with a circular bottom, and that casting transferred its load on to another casting resting on a bracket. The stress at one point was kept down to 600 pounds per square inch, which was quite a moderate stress, and yet curiously enough every one of the stanchions and brackets so placed—there was a large number of them in the building—developed a hair crack at one particular part. I had great difficulty in explaining this. When I found it I first put a tremendous amount of reinforcement across the line of that crack, but it persisted. Eventually I saw what was happening. This inside length of concrete was acting as a strut in one direction and was subject to a stress which caused a small but definite amount of shortening. But the other piece of concrete outside was not subject to any stress, and therefore there was no tendency for that to be shortened. Consequently there was a definite tendency for this outer piece to shear on the plane. We should have avoided these cracks entirely if we had made our structure smaller and had omitted the projection. There are many cases in which the projection which you put in over and above what is necessary to carry your stress is a definite source of weakness. The redundant material will shear off, and may drop and hurt somebody. With the projection omitted the concentration of stress would not involve such a risk.

Mr. P. J. WALDRAM [*L.*]: In supporting the vote of thanks, I should like to say that I have a very keen recollection of some invaluable assistance that Professor Coker gave through me during the War. It was in connection with that most interesting problem, the production of steel aeroplanes, which was one of tremendous difficulty. All the nations were experiencing difficulty in the production of aeroplanes in wood, and it fell to my lot to be connected with their production in steel, a matter which, of course, had to be carried on with the most extreme secrecy. I solicited Professor Coker's assistance, and he gave it to me with both hands. Many of the problems about which we have heard this afternoon came up for discussion during the tests which he then carried out. Some of these apparently theoretical questions which may have seemed to us to-day rather remote from the actual conditions of building were then of the most intense importance. The assistance which Professor Coker gave me led to the result that the efforts of the people who were endeavouring to make steel aeroplanes quietly succeeded. At last on one memorable day in 1918 I heard that orders for aeroplanes in this country had been quadrupled.

Dr. Faber has suggested that experiments on celluloid might prove to be misleading when the results were applied to reinforced concrete. But I can certainly say that investigations of stress distribution proved on test

to be absolutely correct as regards wood, and also as regards steel. As architects we should not look too much askance at the investigation of matters which seem to be rather remote from what we consider to be practical considerations. May I strongly suggest that although some of us may not have considered the experiments shown to-day, interesting as they are, to be very closely in touch with the problems with which we have to deal, yet it is possible that we may find their practical application next door to us after all.

Incidentally it was interesting to note that the nitrocellulose model was loaded to 587 lbs. per square inch. This was equal to no less than 37½ tons per square foot whilst the maximum intensity noted of 1,785 lbs. per square inch represents 114 tons per square foot. In view of the L.C.C. limit of 12 tons per square foot on concrete, these figures showed that the experimental loadings enabled very real stresses to be studied.

Mr. E. FIANDER ETCHELLS : I also rise with that diffidence referred to by previous speakers, but there are still several points to which special attention should be invited.

We are sometimes advised that vertical pressures are transmitted through supporting materials at angles of dispersion of 45 degrees, and we are sometimes told of angles as great as 60 degrees from the vertical ; but Professor Coker's illuminated and illuminating photographs of materials under stress did not show angles greater than 30 degrees from the vertical. Architects, engineers, builders, and others charged with the design and construction of buildings, should take note of the photographic evidence.

There is a common illusion that it is only necessary to get distributing girders long enough and each part of the girder will then support an equal share of the imposed load. The experiments shown here to-night make it plain that the greatest pressure occurs under the centre of the load, and that long, shallow distributing girders are wasteful and inefficient.

With regard to the design of floors, it is sometimes convenient to assume that the load is distributed equally over the floor, but that is not the usual method, in which floor loads occur. On parts of the office floors, for instance, there may be heavy safes or local loads due to filing cabinets. Consequently, some engineers would prefer to design panels of flooring and subsidiary beams to carry heavy concentrated loads, and then design main beams to carry distributed loads of lesser intensity.

Another point is that of the safety factor. I do wish it were possible to stop talking about a universal safety factor of four. In the case of a monolithic floor of steel and concrete, the safety factor is usually more than four, but in a steel lattice girder, it is usually much less than four. In steel the yield stress may range from 55 to 65 per cent. of the ultimate stress. Every primary stress is accompanied by secondary stresses. The real safety factor is not four, it may drop down to much nearer two. When we speak about a safety factor four, we should realise that it is often merely a *figure of speech*, and not a fact.

Mr. Vernon Crompton has spoken of St. Paul's Cathedral. It is certain that the experiments of Professor Coker would have been of the greatest use to the designer of that building. If Professor Coker could have preceded Sir Christopher Wren, then St. Paul's Cathedral might have given us less anxiety to-day. Wren appears to have assumed that his loads would spread uniformly downwards. It was a very simple method, and the common method in vogue at that time, and it is still used by some designers to-day, but it does not always meet the facts. One of the consequences is cracks which testify to Nature's insistence upon correct theory.

I have followed Professor Coker's work for years, and I believe that succeeding generations will see his work in a fuller and wider light. I think that Professor Coker has done for his day, and in his way, what Faraday did more than a century ago. Faraday made visible the lines of force in the space which surrounds a magnet. Professor Coker has done a work as great as that. He has made visible the lines of force which act through solid material.

Architects have given us external forms which make a strong appeal by reason of their salient beauty and silent harmony, but sometimes, some of them may have regarded stresses and strains as something unreal, or merely *x*'s and *y*'s written on paper.

Professor Coker's rainbow photographs have made lines of force very real to all of us. He has brought the invisible world into the visible.

The CHAIRMAN (Mr. Arthur Keen) : We are all conscious of the tremendous progress and development that has taken place in building in recent years as the result of the operations of science, in particular the work done upon the materials used in the structure and equipment of buildings. It all goes back ultimately to such work as Professor Coker has been doing. We are immensely indebted to him, and to people of his calling, for the work they do, and for the progress it enables us to make.

The vote of thanks was accorded by acclamation.

Professor COKER : I have to thank you very much indeed for all the kind expressions which have been used by the various speakers, which are fully appreciated by my colleagues and myself. It has been a very great pleasure to give this paper to the Royal Institute of British Architects. When these experiments were commenced—they have been in progress for three or four years —the idea was present in my mind that they might be of interest to the architectural profession when finished. It must not be imagined, however, that this paper is anything more than a commencement of a very extensive field of work which it is hoped will be continued. One of my colleagues, as a matter of fact, is carrying out some work of this kind on reinforced concrete, and it is hoped that something definite will arise from it in the future. One of the speakers had said that it was a very interesting job. Certainly, after the day's work, on all kinds of other things, it is very pleasant to turn into the laboratory for an hour or two and work at some scientific problem in which you take an interest. That is one of the very few advantages of being a professor.

As I hope to have the opportunity of adding to and revising these remarks before they appear in print, and time is short, no attempt will be made to deal with all the points which have been raised now, especially as some of them call for a considered reply. Dr. Faber made some very interesting remarks, but it is doubtful if he is correct in stating that the term " infinite stress " was used by me.

I thought I said "indefinite." When a material is stressed too much it goes beyond its elastic limit, and there is a redistribution in which the stresses may rise to very great magnitudes in one or more places and the material fails, but you do not get infinite stress in it. The expression is a mathematical figment, and one which I try to avoid using.

Dr. Faber also deprecated the use of a material which had much the same elastic limits in tension and compression. We are not, however, limited to such a material. Suppose for example, we wished to imitate reinforced concrete, celluloid is probably not the best material to use. Glass might be taken which is much the same kind of material as concrete in some ways. It is weak in tension and strong in compression, and it would probably represent the state of things at fracture much more faithfully than celluloid does. Indeed there are many transparent materials which it is possible to use because not only can you buy them as commercial products, but you can also make many kinds of transparent bodies up from organic substances which possess all kinds of properties different from the one which has been used here.

Dr. Faber has contributed some interesting facts in connection with the failure of a bracket projecting from a pillar, which confirm in general the results on cornices described in the present paper, and his views as to the cause of the weakness developed in the case he quotes appear to agree substantially with those in the present paper. In his view, however, the presence of soft mortar joints in walls prevent the marked increase of stress found in the experiments on models of footings. Now in a well-made wall of some age the mortar is not soft, and the argument does not really apply, while in a monolithic wall there are no joints. If, as suggested, a wall and its footing with well seasoned joints were subjected to a crushing load it seems far more likely that failure will commence at the junction with the footing than at any other place. As a matter of fact, in a brittle material like brick or stone the stress distributions we have shown you on the screen persist practically up to the fracture. Therefore I am very much inclined to think that these optical experiments represent the type of stress distribution existing at the failure of brickwork and masonry and that they afford much more information than experiments on brickwork and masonry structures tested by ordinary methods. The deductions from such experiment are often very faulty, because it is difficult to say what has really happened just at the critical stage of failure.

It is very kind of Mr. Waldram to mention the war work on which he and I were engaged years ago when aeroplane struts were of very great interest and importance and as of course they still are.

Mr. Fiander Etchells has brought forward a great many points in this discussion, but want of time prevents adequate reply now beyond thanking him for his very kind reference to the work which has been done.

It was very interesting also to hear the remarks which Mr. Etchells made about Sir Christopher Wren. Considering how rudimentary the state of knowledge of stresses was in Wren's day, St. Paul's Cathedral was a very remarkable feat of construction. It would be a great task now. We have to bear in mind the difficulties he met with in getting proper materials, and criticisms which are often directed against him might perhaps be levelled more suitably against some of his contemporaries.

I thank you, Mr. Chairman, for your appreciative remarks, and hope, as a result of the encouragement which we have received here, that the engineering staff of this College will continue to pay attention to a field of work of which this a preliminary sketch.

The following communication has been received from Mr. G. R. Kent [*L.*] :—

I am very glad indeed to add my tribute of thanks to Professor Coker for the extremely interesting lecture which he has given us.

The experiments were very beautiful, and, as Mr. Etchells has said, showed us the actual strain effects inside the material itself.

It seems to me that the method devised by Professor Coker would be valuable in preliminary investigations of structural units of unusual form, for it would show the *loci* of maxima and minima principal stresses and indicate to the mathematical investigator the positions in which the greatest and least stresses were to be found.

I do not think that the experiment on the window openings could be regarded as being fairly comparable with the conditions found in actual practice. The experiment was on an homogeneous material with holes cut in it to represent window openings and the experiment showed how the material was strained in transmitting a stress past the holes.

In actual practice the material is never strictly homogeneous.

I should like to ask Professor Coker if he could prepare an experiment to show the strain in an axially loaded column, and then moving the load away from the axis and keeping it constant throughout the experiment show the change of strain due to successive eccentricities of loading.

It would be extremely valuable, too, if he could show the effect of the failure of one support in a continuous beam, and the effect of irregular loading on a similar beam, for both of these matters are of the greatest importance to those who design continuous reinforced concrete structures.

The experiments showed with startling clearness how very undesirable it is to have sharp angles, either external or internal, in any structural member under stress.

Professor Coker replies :—

I am very glad indeed to learn from Mr. G. R. Kent's letter and from other sources that optical experiments on transparent models of buildings may possibly be useful to architects in their practice. I quite agree with him, and it does not seem possible to doubt, that the experimental data discussed in my lecture with reference to window openings in nearly homogeneous material is likely to be modified when non-homogeneous material is used as in brickwork and masonry. The Paper was in fact only intended to describe the general principles of this type of investigation using the simplest types of discontinuities in buildings as illustrations. There seems to be a wide field of work for detailed experiments on models which are faithful copies of actual buildings, in which account is also taken of the want of homogeneity

found in practice. Mr. Kent suggests that optical experiments on columns loaded eccentrically would be useful, and these are no doubt very desirable. It may be of interest to say that a limited amount of optical data on columns has been obtained here, although this has not been published on account of its fragmentary character. A brief reference occurs in a Paper published in the Proceedings of the West of Scotland Iron and Steel Institute for 1913, with some colour photographs of the stress distributions in pinned and square ends of columns, including a case of eccentric load.

A further brief reference to stresses in aeroplane struts also occurs in a Paper printed in the proceedings of the Institution of Aeronautical Engineers for 1924. The somewhat analogous case of an eccentric load applied to a tension member is discussed in a Paper published in the *Philosophical Magazine* for October 1910.

As regards continuous beams, there would be little difficulty in measuring the stresses caused by the failure of a support or by the effect of an arbitrary system of loads upon it, although in the latter case it might be difficult to apply a number of distinct loads of, say, 50 to 100 lb. each, or else a uniform load over a small length of a model beam, and yet leave it entirely visible and accessible for measurement. There is little doubt, however, that any such cases can be dealt with successfully.

The Condition of the Building Industry*

BY HERBERT A. WELCH [*F.*].

THE general conditions of the industry and the relations between the parties representing it are, I venture to think, of such importance that I readily accepted your invitation to provide a further opportunity for the consideration of the subject with which we are so intimately associated, but regarding which we have in the past occupied a position of detachment approaching isolation.

Such discussions as we are now about to enter upon are, in my opinion, essential, particularly at the present time, providing as they do the most satisfactory means by which each of the interested parties can state its case and exchange its views. By such means only can the difficulties of the various parties be appreciated and understood, broader views formed, visions lengthened and prejudices overcome. With the fuller knowledge thereby acquired, all parties should become better qualified to give a considered opinion upon the points at issue.

It would be a dull and unreceptive mind which has yet to become conscious of the fact that in every section of industry there is to-day apparent a totally different spirit and outlook from that which existed, say, 10 to 15 years ago. In the building industry Labour has acquired an added sense of power due in part to the economic position resulting from the greater demand for its services in relation to the supply, and in part to the increased strength of the Labour Party, composed mainly of representatives of the trade unions, which has acquired the experience of government and is at present the strongest party in opposition in the House of Commons. Employers faced with the changed conditions due in part to the above causes, and in part to the much changed national and international conditions operating generally since 1914, and in addition to the less recent but by no means less important development of the system of sub-contracting, find the need for a considerable measure of adjustment, if not for an entire reorganisation of the industry, in order satisfactorily to meet these changed conditions.

The time has arrived when a decision has to be reached whether satisfactory progress can be made by the use of the old machinery overhauled in order to make it function satisfactorily under the new conditions, or, if better results might be obtained, by scrapping at least some of the existing machinery, for the purpose of replacing it with new and more up-to-date plant. While appreciating the natural desire and inclination to build upon past experience, and the tendency to compare to-day's conditions with those of the past with a view to making them dovetail wherever possible, I consider, nevertheless, that the distant past offers us but little help towards finding a solution for present-day difficulties. Whilst we should to some extent be guided by events in the history of the industry, we must not allow ourselves to become fettered by decisions arrived at in the past under conditions which no longer exist. Let us not forget that success finally attended our efforts in the great war because at long length we realised that the old conditions of warfare had changed and that the new conditions needed new thought and new appliances, which, with the traditional adaptability of our race we embraced, and quickly made ourselves master of once we had realised the need for change.

Personally—on this occasion I speak for myself, though I am assured that my views are shared by many others—I am of the opinion that there exists at present a tendency to view the subject of the management and development of the industry from too narrow a standpoint. If the industry is properly to function under the changed conditions with which it is confronted the existing machinery must to a large extent be replaced by more up-to-date plant which will be capable of assuring more satisfactory results.

In order to appreciate the nature of these changes and conditions let us consider for a moment what were in the past and what are to-day the main component parts of the industry. In the not too distant past the industry consisted mainly of the builders, unions—not nearly of such magnitude and importance as now—architects, and a comparatively few merchants and sub-contractors, who supplied such materials and performed such work *only* as the builder and his staff were then unable with equal facility and economy themselves to supply and perform. The builder then depended, and was happy to depend, mainly upon the ability of himself and his staff satis-

* A Paper read at a conference of Architects at Nottingham on 12 February.

factorily to carry out the work entrusted to him. To what degree do we to-day find these conditions changed? In order to prepare his estimates on a more equitable and more economical basis, the builder requires, in addition to the architect's drawings, to be supplied with a bill of quantities, prepared by a properly qualified quantity surveyor, whose services are again sought at the completion of the work for the purpose of adjusting variations. In the actual administration and supervision of the work, therefore, there appear most closely associated four parties, which, mentioned in the order of their appearance, are: architect, quantity surveyor, builder, operatives.

That, however, is but a beginning. Immediately upon the signing of the contract the builder no longer proceeds to produce by his own staff the major part of the work necessary for the completion of the structure, but architect and builder proceed to set in motion the efforts of various sub-contractors—whose callings are legion, as may be seen by the public advertisements attached to the outside of practically every building in course of erection—who at the various stages supply or "supply and fix" into position the various parts of the structure. In effect the builder has to an appreciable extent developed less along the lines of a master craftsman and more along the lines of a financier and a co-ordinator of the work of sub-contractors. In consequence of this change the number of parties interested in the industry—whose interests cannot under existing conditions be ignored—have greatly increased. Whether or not the system of sub-contracting which at present prevails is good or otherwise for the industry we are not here to-day to discuss. It might, however, on a subsequent occasion be an interesting and profitable subject for discussion. I have mentioned the matter in order very broadly and briefly to indicate to what extent the "parties interested" in the industry have multiplied during comparatively recent years.

In spite of the increase in the numbers of the parties interested we were recently told by Mr. W. H. Nicholls (past president National Federation Building Trades Employers) that the *best brains* were no longer coming into the industry. We appreciate Mr. Nicholl's frankness. Our own experience has, unfortunately, forced us to arrive at the same conclusion. But *why* are not the best brains seeking employment in the industry? Clearly because the industry offers fewer inducements than other callings. How long can this state of things be allowed to continue? Obviously we cannot longer be satisfied with second and third quality brains; but unless a move be quickly made to induce the right type of young man to follow the crafts, in due course *second or third* quality brains will cease to be available and we shall perforce have to accept what we might term mental "Grizzles"! It is for the industry to see to it that the conditions affecting the crafts are such that the younger men with A1 brains will return, and return quickly, to what has ever been a traditionally high calling. It is a reflection upon the building industry that at a time of great national shortage it has been unable to cope with the public demand for houses, and at the same time tackle the normal building work necessary in other directions. True, the total demand has been abnormal, but an intelligent and enlightened industry should have been able so to adjust itself by this time as to render it unnecessary for the Government to insist upon calling in the engineering industry to assist in the provision of houses for the community. When referring to the building industry in this matter my remarks are intended to embrace manufacturers, merchants and others upon whom to an appreciable extent the builders depend. Had all these parties met together some five years or so ago for the purpose of giving consideration to the then changed conditions and demands, and had they remained in close consultation and co-operation in the meantime, it would appear likely that at this time the industry would have been well able to meet the public demands. In the light of recent experiences the public has a right to be assured that such a state of affairs shall not recur. I fear, however, that there are at present no clear indications that such an assurance could with confidence be given. This can, in my opinion, be done only when the active interest in the industry is placed upon wider foundations, by the admission into its councils of representatives of a greater number of the parties interested, who will thereby become more closely associated with its welfare. *Greater and wider collaboration than at present exists is essential.*

You doubtless are aware that existing agreements terminate this month, and that discussions are, and have been for some time, taking place between the employers and employees for the purpose of drawing up new agreements which will govern the industry for a further term of years. I hope—and I am sure we all hope—that these discussions will result in a satisfactory settlement of all matters outstanding, and that the industry will proceed to enjoy a long prosperity.

I do not wish to be unduly critical of the procedure which is being followed now as in the past, in respect to the discussion and formulation of these agreements, which among other matters must deal (and *should* deal with wide vision and reasonableness) with such matters as wages, hours of working, overtime, wet time, output, apprenticeship, organisation, supply of materials and other matters, some of which are admittedly best dealt with only by the two parties mentioned. I do, however, suggest in regard to a great proportion of the matters which must necessarily be considered, that the time has arrived when at least architects and surveyors should have full knowledge of matters in dispute and should be consulted before a decision has been arrived at. Enjoying as we do a very intimate knowledge of the industry, and possessing, as I suggest we do, at least the average amount of common sense and goodwill, and, moreover, by virtue of the judicial authority we are accustomed to wield between our clients and the builders, we are well qualified and equipped to contribute something toward the common good. When I had the honour recently to read a paper on this subject at the R.I.B.A., the principal representatives of the profession, employers and employees who spoke, expressed a willingness to co-operate along the lines I have indicated. We hope for and await a move in this direction.

In America during recent years considerable progress has been made along the lines of closer co-operation between those interested in the industry. There exists

in New York and several other large cities and districts, a Building Congress, the membership of which is comprised of representatives of financiers, architects, surveyors, engineers, contractors, sub-contractors, trades unions, equipment dealers, material manufacturers and the general interests, including the Press and education authorities. These Congress groups deal with apprenticeship, seasonal employment, codes, publicity, research survey, standardisation, elimination of waste and building conditions generally.

It is abundantly clear from the information to hand that much useful work has been and is being done by these bodies, and that better organisation and clearer understanding has resulted from the closer co-operation between the parties concerned.

Whether or not it is desirable in this country to proceed along similar lines needs close consideration and discussion. As a first step, however, I think that an experiment for a limited period—say, 3 years—might be made by the formation in various districts of local organisations composed of architects, quantity surveyors, builders and operatives to consider from time to time matters of importance concerning the welfare of the industry. However much conditions may vary in different localities the principle of closer co-operation and mutual understanding remains uniform. I have been requested to be brief in order to allow ample time for discussion. I will therefore conclude in the hope that you share with me a desire for the furtherence of a close co-operation between all the parties, and that you will use your best endeavours by this means to guide the industry back to the exalted position it used to occupy.

Library Notes

LA RENAISSANCE EN FRANCE. L'architecture et la décoration par Camille Martin, Architecte. Deuxième Série. fo. Paris, n.d. £1 12s.

This is a large folio volume containing a great number of very fine photographic illustrations of Early Renaissance buildings, chiefly of the sixteenth century, including many details of ornamental portions, together with short descriptions in the text.

L. A.

HOTELS ET HOTELLERIES. By Gaston Lefol. fo. Paris [1925]. 18s. [Paris: Ch. Massin & Cie., Editeurs, 51, Rue des Écoles.]

A series of exterior and interior views and plans of modern French hotels, both large and small. Many of the plans are ingenious and suggestive, and all are interesting.

B. O.

SUGGESTIONS FOR THE STUDY OF COLOUR. By H. Barrett Carpenter. 8vo. Rochdale, 1923. 8s. 6d. [B. T. Batsford, Ltd., London.]

This little book gives a very great deal of useful information in a concise manner. Mr. Carpenter states useful facts and gives clear reasons for these. His chapters on Harmony and Contrast are good, but that on Discord is useful; also that which deals with how to avoid dirty colouring.

A. E. H.

COLOUR AND ITS APPLICATIONS. By M. Luckiesh. 8vo. New York, 1921. 25s. [D. Van Nostrand Company, New York.]

An excellent book which deals with colour scientifically and which everyone should read who has to deal with colour.

C. S.

WHAT IS GOOD AND WHAT IS BAD IN ART?

Sir Reginald Blomfield, in a remarkable article of criticism and of architectural exposition on recently published books on architecture, in the current *Quarterly Review*, sums up æsthetic appreciation as follows:

"In the arts there seems to be no solution of the perennial problem—who is to say what is good and what is bad in art? The old French Academy spent year after year in the attempt to define "*le bon goût*," and one has to admit with regret that their efforts were unsuccessful. It is a problem that has vexed all thinkers since the days of Aristotle. He referred all such questions to the man of knowledge and enlightenment, and this, at least, is better than the paralysing verdict of "*quod semper quod ubique quod ab omnibus*," which seems to put a stop to any independent judgment of the past. Yet is is not entirely satisfactory—the men of judgment sometimes differ, and the layman is set the further difficulty of deciding which he is to follow. For the artist himself the problem is less difficult. Every sincere artist who has studied his art and acquired his own technique inevitably builds up his own conviction as to what he is aiming at and how he is to set out to reach his ideal. However inarticulate he may be in formulating his ideals, they will be found at the back of all his work. Consciously or unconsciously, he will strive to reach certain absolute standards, and the exhortations of his critics will leave him unperturbed. My own view of architecture, both now and in the future, is that the deliberate search after originality is futile. 'The wind bloweth where it listeth.' These things will come of their own or not at all"

ARCHITECTS' WATER-COLOUR DRAWINGS.

At Mr. W. B. Paterson's Gallery, 5 Old Bond Street, there is on view until the end of February a very charming exhibition of water-colour drawings by two well-known architects—Mr. J. J. Joass and Mr. Alexander N. Paterson, of Glasgow. Both artists are skilled in the medium, although their methods are far removed. Mr. Paterson in some aspects is the more accomplished painter, and Mr. Joass perhaps the more individual and personal. Mr. Paterson's subjects are mostly Italian—painted at Florence, Assisi, Perugia, Siena—or French, such as that admirable water-colour of the Rue de la Paix, Old Tours. He never selects his point of view from a conventional angle, and never fails to get a pictorial affect.

Mr. Joass, is content to be insular and largely to express his devotion to Dorsetshire and to the shipping and views from Poole Harbour, Corfe Castle, etc., to subtle effects of sky and the no less subtle effects of light on sea and the water of Poole Harbour, familiar to Mr. Joass as an ardent yachtsman. In some of his larger drawings (the majority of his forty-three drawings are to a small scale) one seems to find something of the quality and attitude of Thomas Girtin.

Neither the range of Mr. Paterson nor of Mr. Joass in his drawings seems to be in any way affected by the essentially more definite outlook of practice in architectural draughtsmanship.

Eighth General Meeting (Business)

THE REGULATION OF ARCHITECTURAL COMPETITIONS

MONDAY, 15 FEBRUARY 1926

[SIR BANISTER FLETCHER (VICE-PRESIDENT) IN THE CHAIR]

The CHAIRMAN: The following notice of motion by Mr. Herbert W. Wills (Fellow), seconded by Mr. H. D. Searles-Wood (Fellow) has been received:—

That the Regulations for the Conduct of architectural competitions be amended by the adoption of one of the two following changes (*a*) or (*b*) and the addition of Clause (*c*). Details to be left to the consideration of the Competitions Committee.

(*a*) All binding conditions should be eliminated. Instructions to competitors to take the form of suggestions which both they and the assessor may follow as they deem fit.

(*b*) That binding conditions be retained and that in case a competitor considers they have been ignored he shall have the right to appeal to the Competitions Committee of the Institute. In doing so he shall pay an agreed deposit to the R.I.B.A., such deposit being forfeited to the R.I.B.A. if his complaint is considered by the Competitions Committee to be unfounded. If, on the other hand, they find on investigation the complaint is justified, they shall so report and the award shall be quashed, a new assessor appointed by the President who shall assess the whole of the designs sent in and to whom the assessor's fee agreed upon shall be paid.

(*c*) Whenever architects are invited to send in applications and qualifications for selection for a limited competition, such invitation shall be advertised at least on three different dates during a period of not less than one month.

I will call upon Mr. Wills to move the resolutions.

Mr. H. W. WILLS [*F.*]: It seems to me that the main cause of the trouble arising out of competitions does not come from a dispute about the assessor's judgment so much as from a dispute about his interpretation of what we call binding conditions. Here he is often faced with a dilemma. He sees a design which he believes to be the best, but that design conflicts with some of the conditions that he has laid down and made binding. I think, in a great many cases, that with the best will in the world he has wandered from the straight and narrow path, and chosen the design which he thinks best and which he thinks the promoters ought to have, and it is in these cases that trouble arises. Now, we often think that the condition is so obvious and reasonable that there can be no possible objection to it. I will take the case which often occurs in the conditions of competition—a design, let us say, must not exceed the limits of the site on which it is placed. Well, that seems a piece of common sense, but carry it out to its logical end. We will say that you have a site between two adjoining buildings, a couple of hundred feet long, and we will say that you have a condition of the competition that the sizes of all rules, all dimensions, shall be put on the plan. Now, it is quite possible through a simple error that your total dimensions might count up to a couple of feet over your 200 feet. If that happens, the binding condition is infringed, and the assessor who adhered to the straight and narrow way would have to reject it, knowing as he might do at the same time that it was by far the best design sent in, and that the error of a couple of feet in two hundred would be very easily adjusted.

I have not asked a single man to come here to support me in my resolutions. The room is not packed with my followers, it may be full of my opponents; and I do not wish to stir mud or to mention past cases; and if I do mention a very few cases that have happened in my experience, it is simply to illustrate my point and not with an idea of directing attention to these particular competitions. We had some years ago a competition for a building in which one of the conditions laid down was that corridors in that building were to be directly lighted by windows throughout their entire length. The assessors gave their award to a design in which the corridors ran straight through the centre of the blocks, and were only lighted at the extreme ends. In that case, the competitors who adhered to the clearly laid down conditions had produced something that was put on one side, and a grave injustice was done to them. In another case (a large university building on a very fine site) there was a condition that the hall of that university should be to a certain area. Now, no one could give that area without making it a rectangular room, but the award was given to a man who produced a very nice plan with a semicircular room of about two-thirds the area. There was a certain case of a big asylum competition. One of the conditions of that competition was that the asylum should be built in two portions, the first portion to contain 700 inmates, I think, and the completed building 1,200. It was a binding condition of that competition, the accommodation for each class being different from the other, that no inmates in the smaller scheme should have to use accommodation not intended for their class. In the award given every class of inmate in the smaller building had to occupy accommodation meant for another class. There was a case many years ago of public buildings required for a country town; there were police-courts, a town hall, and municipal offices. Each section was to be contained in an entirely separate building. The assessor placed first a design which placed the whole of the accommodation in one building.

I need not labour these points further, because many instances of a similar kind will occur to everybody in this room. I am speaking of facts which are often brought home to us. With regard to my first proposal, then, which I think by far the best, it is that instead of having any binding conditions in a competition, we should simply have a series of suggestions. In most cases these suggestions would be carefully followed, but freedom would be given both to the competitor who thought of something better, and the assessor who came to the conclusion that it was better. Now, there is this point about conditions, and I have carefully considered it. Conditions are very difficult to draw up, and the best conditions can, in my opinion, only be drawn up after one has seen many schemes for the same building. In fact, you could draw up a perfect set of conditions after the designs were sent in, but it is very difficult to draw up a perfect set of conditions before the designs are sent in.

If it should be decided that binding conditions should be maintained in a competition, I think there should be this proviso: that where a competitor complains that any binding condition is broken, he should have the right of appeal. I take the analogy of the law. We may say in speaking of law that our law is practically formed by the binding conditions of a competition. You must remember what takes place in the law. A judge is not asked to decide whether a litigant is intrinsically in the right or not, but simply whether he is right according to the law laid down. I dare say you all know the very hard conditions that have sometimes obtained where an architect has been foolish enough to carry out work which ought to have been under seal for a body, and has neglected to get a contract under seal. I know of one case which happened when my uncle, Sir Alfred Wills, was on the bench. An architect had completed drawings and carried out a school building. He had done all his work, but he had omitted to

obtain his contract under seal. The judge, in giving his decision on the subject, pointed out that he must not only lose his case, but bear the costs as well. I have heard it argued that if we set up a court of appeal, it would shake people's confidence in assessors. I do not think, if we follow the analogy of the law, that we need have the least fear. No one thinks less of a High Court judge because anyone can appeal against his decision. Nobody thinks any worse of the Court of Appeal because its decision may be disputed and taken up to the House of Lords. I do not think we need have the least fear if we set up a system of doing justice to our own profession within our own body and our own ranks. I think the confidence of the public in us would be enhanced rather than otherwise. The procedure that I propose in that case is that a competitor who has such a complaint to make should made the complaint to the Secretary of the Institute, accompanied by a substantial deposit, that the matter should then be handed to the Competitions Committee, and if the Competitions Committee found out that the complaint made was baseless, the deposit should be forfeited to the Institute, but if they found that it was substantiated, then the award should be quashed, a new assessor appointed, and the fees which would have been paid to the first assessor who had failed to carry out his work properly should be paid to the second assessor appointed. Without some such safeguard as this, it has never appeared to me to be quite fair and reasonable that an assessor's award should be taken as final and binding. It is asking us to accept the assessor as occupying a papal position, without employing any safeguard at all.

The third resolution is a very simple and short one. A competition sometimes arises for an important building in which applications are asked for from those wishing to compete, and I think it is highly important that in such cases the competition shall not be advertised once, but shall be advertised two or three times for a period of a month. It may very well happen that you are away for a fortnight, and you may not have your attention called to a competition that you would like to enter. The time is altogether too short. I think that is all I have to say.

Mr. H. D. SEARLES-WOOD [*F.*]: In order to permit of discussion, I formally second the resolutions.

The CHAIRMAN (to Mr. Wills): Do you want them taken separately or together?

Mr. WILLS: I put them separately. If (*a*) is passed, (*b*) falls to the ground; (*c*) stands by itself.

Mr. W. J. H. LEVERTON [*F.*]: I think there are certain objections to resolution (*a*). If the assessor is allowed either to follow or disregard suggestions as he thinks fit, a competitor may be grievously misled. The competitor may do something in accordance with the suggestions that is against his judgment, and the assessor may afterwards throw the suggestion over and possibly select another design that may have the arrangement which the first competitor originally intended to put forward, but dropped. It is, of course, possible that a competitor may contrive an arrangement against the suggestions that may be undoubtedly the best. Mr. H. S. Statham gave an instance some years ago in a lecture before the Institute. There the competitor made what was undoubtedly the best plan, but disregarded what was a very important condition, and the assessor stuck to the conditions and consequently, although the best plan, it was lost. It might be possible to award the premiums in accordance with the conditions and afterwards select another plan for execution. You want to have the best plan for execution, but it is just possible that some other competitor might have thought of the arrangement which this man had made, but decided not to put it in his plan because it was against the conditions. The assessors, I think, might be required to be more careful in answering the questions put forward. In one important competition there were two questions: (a) whether a carriage porch was required, and (b) whether a tower was required. The answer was that this was left to the competitors. Sometime after the competition was decided, the assessor was speaking somewhere, and it was pretty clear from what he said that he was much against carriage porches, because they darkened the entrance hall, and he was very much in favour of a tower. Designs, therefore, which included a carriage porch, or did not include a tower, would hardly get proper consideration, although these matters had been left to the competitors. Some fifteen years ago I made a suggestion in the pages of *The British Architect* that a court of appeal against assessors should be adopted, and I instanced what Mr. Wills has mentioned, that a judge's decision in the courts is often appealed against, and such appeal is considered no reflection upon a judge's ability. The opinion then come to was that the assessor's decision should be accepted for better or worse. I think we should have a court of appeal, and that it would be very dangerous to allow suggestions to be disregarded.

Mr. H. A. WELCH [*F.*], in speaking on the first resolution: I should like to make it plain that my remarks are personal and not made in a representative capacity as chairman of the Competitions Committee, for the Committee has not yet had an opportunity of considering the proposals which Mr. Wills is moving to-night. With regard to resolution (*a*), that binding conditions should be eliminated, I feel that while this might be a highly desirable stage ultimately to reach, it is quite impossible in practice. I think there is no assessor who has been faced with the drawing up of conditions for the purpose of promoting a competition who has not found that it is incumbent upon him to make certain things abundantly clear and definite. We on the Competitions Committee have always held, however, that these definite and binding conditions should be reduced to a minimum. I quote from the Regulations and Conditions drawn up by the Institute in 1924, in which this note appears:

"It is essential in drawing up the instruction to state definitely which of the conditions must be strictly adhered to under penalty of disqualification from the competition and which of them are optional."

That is in the matter of the regulations. Coming to the question of the advice to assessors which the Institute has for many years issued, two things are stated:

"Conditions should not be imposed which tend to fetter competitors in the preparation of their schemes, so that whilst all necessary particulars are given, the intention of the promoters should, as far as possible, be put in the form of suggestions, giving competitors the fullest latitude in eliciting the best possible solution. Assessors should bear in mind that competitors are in the position of having been consulted by the promoters in order that their advice may be secured.

Then, further, while touching on this question of making certain conditions final and binding, it says that the assessors should not allow a limit of cost to be fixed unless they are satisfied that the required accommodation can be provided for the specified amount. They must induce the promoters to accept their views in this respect before agreement to adjudicate. On the one hand, we have the desire of this Institute and its Competitions Committee to reduce to a minimum anything approaching final and binding conditions; on the other hand, there is a clear indication and acknowledgment in what I have read to you that certain things must of necessity be final and binding. I cannot conceive, for instance, any assessor being placed in the position of taking instructions from the promoter of a competition and being given an entirely free hand in the drawing up of the conditions governing that competition. He will be very clearly defined as to the site, as to certain particular ways in which the site itself is affected either by other buildings or by the claims of the public in certain particulars. He will also, no doubt, be given certain clear instructions as to the amount of cost of the new buildings which must be adhered to. He will also find, in all probability, either as an instruction or

from his own conclusions, that certain rooms or departments must of necessity, by virtue of the administration of the particular building, he placed in certain positions. And I cannot possibly conceive that the opportunity would occur to any assessor to give effect in full to this resolution (*a*), much as he might desire to do so. Surely every assessor would be delighted to adopt this clause if practicable. If it were possible I am sure the assessor would accept the position with both hands, but I am equally sure that he will never find himself so pleasantly placed as to be able to act in a competition in which he can issue broadcast to the intending competitors the information that conditions will not be binding. Therefore, because I consider the proposal impracticable, I would suggest that in its present form it be not accepted. I would, however, call the attention of the meeting to certain recommendations which the Competitions Committee have recently made to the Council, and upon which the Council, I believe, has voted favourably this afternoon. I read the following clause :

All assessors should be reminded " that accordingly the value and importance of drafting conditions and replies to questions so as to leave the maximum latitude to competitors in the solution of the problem should not be overlooked."

That, sir, is as far as we can go. We cannot bind the hands of every assessor who is subsequently to be appointed to conduct a competition, when, immediately he is faced by the promoters of that competition, he may find it impossible to carry out the regulations here passed.

Mr. H. V. ASHLEY [*F.*] : I think assessors find one great difficulty in nearly every competition in arranging with the promoters that their award shall be final and binding. When they have got over that great difficulty—and I think in the majority of cases it is a great difficulty—the assessors generally find that the promoters want certain things in their proposed buildings, and they make it quite clear that they must have those things. It seems to me that in every case an assessor must make it perfectly clear in his conditions that certain things are obligatory in a design which is to be accepted. Therefore it is quite impossible, I think, that this Institute should carry out Mr. Wills's proposals—that is to say, to have no binding conditions whatever. I take it as an aside that Mr. Wills does not refer to the binding character of the regulations governing the competition.

Mr. WILLS : I refer to the conditions as issued.

Mr. ASHLEY : I think from what Mr. Welch has said and from what I have said it will be plain that the promoters in nearly every case make certain requirements which they say are essential, and it is therefore necessary for the assessor to embody these requirements as binding.

Mr. G. H. JENKINS [*F.*] : I should like directly to oppose that. What Mr. Wills is trying to do is to avoid the sort of catastrophe we had the other day in a competition in the north of England. Every now and then we have cases where a competitor considers that although a very fine design has been accepted, the conditions have not been complied with. Mr. Wills's suggestion is that although the assessor and the committee have put forward their ideas of accommodation, of cost, of site, and of the placing of various rooms in a building, yet if the competitor produces something which obviously meets the conditions much better, the assessor and the committee who have appointed him—the promoters—shall not be compelled to turn down a fine design because it does not comply with some of the conditions. The conditions should be treated as suggestions, and if a competitor turns out a design which an assessor thinks is better although he has gone outside the conditions in certain directions, the competitor shall not be turned down on that account, and the other competitors shall not be given the chance of saying, " Yes, this is the finest design. We quite agree. But we could have done quite as well as this if we had not followed the conditions." As I understand the idea of a competition, it is that it should produce the finest design for that particular building, and we do not want to have the assessor's hands tied because he happens not to have seen that final solution beforehand.

Mr. MAURICE E. WEBB : [*F.*] Would Mr. Wills agree to take out the question of site ? We must make that a binding condition. And would not he agree that we should recommend assessors in future that binding conditions should be the absolute minimum ? There must be some binding conditions. For example, competitors must be told that their drawings will have to be delivered by a certain date. You cannot have people waiting six months. There is the site again—he must stick to the site, the site must be a binding condition. You cannot go building all over the place. Will not Mr. Wills modify this resolution that, barring certain conditions as to site and so forth which must be binding, the remainder of the competition shall be left as free as it is possible to leave it ? Mr. Wills has put forward this resolution in a way which makes it impossible for one to vote for it.

Mr. E. STANLEY HALL [*F.*] : I should like to follow Mr. Webb very closely, both in the order of speaking and in his argument. I have actually drafted an amendment as follows :

" Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions which both they and the assessors may follow as they deem fit."

People seem to forget sometimes that there is a person called the promoter in these competitions. He is an important person, who cannot be cut out altogether. After all, he foots the bill. He may say of some things, " I will not do without them." We cannot have conditions which are entirely unbinding, but I think that everybody in the Institute has one object in competitions—namely, to get the best solution of the problem, otherwise competitions are a waste of time and money. This is what the Competitions Committee and the Council have been out to do—to reduce the binding conditions to a minimum, and to leave the assessor to solve the problem in the best possible way.

The CHAIRMAN : I think that Mr. Welch has got in the instructions to the assessors something very much on the lines of Mr. Hall's amendment.

Mr. WELCH again read the passage which he had previously quoted from the advice to assessors given by the Institute : " Conditions should not be imposed which tend to fetter competitors in the preparation of their schemes," etc. He continued : That is emphasised again by the reference from the Competitions Committee to the Council this afternoon which I have also read. We on the Competitions Committee are most anxious not to hamper in any way the free operations of all those competitors who take part, but we do, by virtue of the long experience we have had, realise that the assessor never finds himself in the position of being free to do anything he likes. He has to co-operate with the promoters in these conditions long before they get to the competitors. And because of this he finds himself always bound by certain definite conditions. If the Institute were to issue an edict of the kind Mr. Wills suggests, the first assessor who had one definite condition from the promoter would say, " I cannot do this, gentlemen. I have a definite condition as to cost, or that certain rooms must not be in the basement, or that a certain department must be on the ground floor, and I cannot conduct the assessorship on the lines you now lay down. Your regulations are hopeless." That is the position. You cannot pass this as a practical proposal.

Mr. W. H. ANSELL [*F.*] : If the latest recommendation passed by the Council is read, I think Mr. Wills will agree we have gone as far as he himself wishes ; namely, we have pressed upon assessors the desirability of eliminating, as far as possible, binding conditions—it is impossible to eliminate them altogether—and we have given to other conditions a certain elasticity.

Mr. T. R. MILBURN [*F.*]: I think it will be well to keep my remarks to the general question. With your binding conditions you must have a date. And you can't say "That is the site; you can add a few acres if you like." Or if you are instructed by the promoters to have a certain number of Committee-rooms you cannot say "We will add another half dozen or so." But there are a great many questions arising between an assessor and a committee before the conditions are published. As Mr. Hall says, after all, the promoter of the competition foots the bill. You have to consider him. And there are many negotiations which take place which the assessor has to be very strict about before the conditions come out. Important points arise in the negotiations between the assessor and the committee which competitors do not know anything about. He protects their interests in many ways, which sometimes is rather difficult, and the more these questions are left open the better. I agree that, as far as possible, conditions should be suggestions, and they should be largely left to the assessor after he has received the hints and instructions of the Council of this Institute and the wishes of the Competitions Committee. The discussion has been illuminating.

The CHAIRMAN: Would Mr. Wills like to reply?

Mr. WILLS: I never proposed—I should not be so foolish as to propose—that competition conditions should contain less information than they contain at present, but simply that what we call conditions should be suggestions. When a client comes to you for a small house, he practically makes suggestions; he says he wants a couple of sitting rooms and three bedrooms. No man in his senses would immediately prepare a scheme for six sitting rooms and 20 bedrooms. The average competitor, simply because he can consider what is laid down in the instructions to be suggestions, would not dream of departing from them unless he has very good cause to. My case only covers the exceptional cases—which I should say come in in certainly one competition in five, and I myself would put it higher, two in every five—where the assessor's award definitely contravenes the conditions which he himself has laid down. I am sure the general attitude of both assessors and competitors would be to adhere closely to the suggestions made as to cost and as to accommodation. But latitude should be given to a man who thought the problem out in a better way, and the assessor would be able to take that better way, as he very often does now. But when he does it now he does it by ignoring a condition which he himself has laid down. I told you of certain cases in point which had occurred within my own experience. I will tell you of another case. You all remember the Port of London Competition. In that competition a suggestion—it was only a very strong suggestion—was made that the public spaces of all the offices should be merged into one great hall. That was a suggestion which was followed, I think, by the majority of the competitors. In the winning design, Sir Edwin Cooper took the common-sense view, and he made the Port Rates Office, which had to deal with the greatest amount of work and traffic, like a bank, and I do not think there was anyone in the country who did not admit that an exceedingly fine design had been sent in, and that the right award had been given. But had that strong suggestion for one large hall been in the form of a binding condition, a good deal would have been said about the Port London Competition. If a man by inadvertence, by putting down careless figures in dealing with a site of 200 feet long, made it count up to 202 feet, then I say, if it was the best design submitted, the assessor should put it first, as it was simply the result of an accident, and that building can be reduced to 200 feet without detriment. In dealing with conditions I was dealing with instructions given to competitors about a building; I was not dealing with the date of sending in, nor with the fact that designs have to be on paper and not on tin plates; I have not any objection to making that binding. But in the accommodation given in buildings, in the cost and everything else, leave that loophole, make suggestions as strong as you like, and 29 out of 30 competitors will adhere to them, as they do now. But let the 30th man who can see something better have the right to take his courage in both hands and submit the design which he thinks better, and leave the assessor free from that eternal dilemma of either having to infringe his own binding conditions, or to reject a design which in his opinion and that of others is admittedly the best design sent in. I see no reason to modify my resolution in the slightest.

The CHAIRMAN: We will take a vote on that.

Mr. HALL: I had an amendment drafted, namely," Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions which both they and the assessors may follow as they deem fit."

Mr. WALTER CAVE [*F.*]: I shall be pleased to second that.

Mr. GEORGE ELKINGTON [*F.*]: I do not think Mr. Hall's amendment meets the bill—it simply reaffirms the policy of this Institute, and in that way I do not think it would be satisfactory to Mr. Wills. The case which Mr. Wills has attempted to make out hangs on the fact that the conditions of the competition are not drawn up by this Institute, but by an assessor appointed by this Institute and the promoters of the competition, and I think what is in Mr. Wills's mind is that if we could strengthen the hands of the assessor *vis-a-vis* the promoters with whom he is dealing, we might do some useful work. And I have thought out an amendment which would embody Mr. Wills's ideas; it might commend itself to discussion afterwards. "The R.I.B.A. reaffirms its belief that the more elastic the instructions to competitors, the more likely is a satisfactory result to be obtained in any competition, and that its policy has been and is directed to that end . . . and that the assessor must make his award in strict conformity therewith." That is, that the binding conditions, once they are laid down, are equally binding on competitors and promoters. It is for us to say they would have had a better design if they had left the conditions on those matters elastic.

Mr. MILBURN: I do not like that word "elastic."

The CHAIRMAN: We must take Mr. Hall's amendment.

This was put, and was carried by 21 against 3.

On being put as a substantive motion the figures were the same.

The CHAIRMAN: Do you press your amendment, Mr. Elkington?

Mr. ELKINGTON: No.

The CHAIRMAN: Do you want to speak about (*b*), Mr. Wills?

Mr. WILLS: No, unless I am asked about it.

Mr. KEEN: We have disposed of (*b*) by having accepted (*a*) as amended.

The CHAIRMAN: In my opinion it does not dispose of (*b*). I ask you to deal with (*b*).

Mr. WILLS: I can speak very briefly on (*b*). As long as binding conditions referring to a proposed building exist there should be a right of appeal.

Mr. MILBURN: I think the drafter of this resolution has forgotten all about the man who is going to pay. We must consider our clients They may not like the plan which we have chosen, and you cannot have Regulations for one side and not for the other. In any discussion which takes place on this I would like members to remember the rights of the other side.

Mr. WELCH: We cannot accept this, and on two main grounds. One is, that if it is deemed desirable—as I think it is not—that an award should be set aside if it is desirable to do so, clearly there cannot be an appeal which is open only to one side. This proposal here says that an appeal against

an assessor's award can only be made by the competitors who consider that they have suffered. If that is to be carried into law, so far as this Institute is concerned, the promoters who happened to be interested in this competition have to stand by and watch a sort of dog fight between members of this profession. On the face of it, it cannot possibly hold water. We feel that there cannot possibly be a satisfactory arrangement for any competitive system, as we understand it, if an assessor is going to be open to attack to the extent of his award being other than final and binding. That is a principle we have discussed *ad nauseam*, not only in the Competitions Committee, but in general meetings of the Institute. In (*b*) there is nothing to stop any three, four or five competitors in any competition subscribing between them the sum necessary to have the competition reconsidered in all its details and to hear both parties. That is not only unjustified in the face of the results of any competitive system, but you will never get a voluntary competitions committee to undertake such a task. I think Mr. Wills's proposal is unworkable and undesirable.

Mr. WILLS: Exactly the same arguments can be used, that of the Court of Appeal in Law and the House of Lords.

The SECRETARY read (*b*).

Mr. WELCH: Before we vote, I suggest to Mr. Wills that the vital difference between this case and that of the House of Lords is, that either party has the right of appeal, whereas in this case only one side has the right.

Mr. HALL: Who pays the assessor's second fee?

Mr. F. R. TAYLOR: In reference to this matter of appeal, in appeals to the House of Lords, all parties have a right to attend in order to state their case; and unless we have something of the kind, the appeal would not be justified.

Three voted in favour of (*b*), and it was declared lost.

The CHAIRMAN: Now (*c*), Mr. Wills.

Mr. WILLS: I have spoken for it.

The CHAIRMAN: I will just ask the Secretary to read it.

The SECRETARY (Mr. MacAlister) read the resolution.

Mr. ANSELL: May I oppose this as unnecessary? The assessors appointed by the Institute in consultation with their Committees are capable of deciding how often a competition shall be advertised, and I submit it is entirely unnecessary for this meeting to waste time to decide on details of this character.

Mr. HALL: There are many occasions when the invitations are issued before the assessor is appointed, and therefore it may be *ultra vires* for us to tell the promoters, who are inviting architects, what they are to do about the invitation.

Mr. C. F. WARD: Who will do the advertising? This is in the hands of the client, the promoter.

Mr. ASHLEY: They could not carry out this proposal.

Mr. WILLS: The promoters usually work with the assessor.

Two voted in favour of (*c*), and it was declared lost.

DISTRICT SURVEYORS IN LONDON.

The following letter was written by the late Mr. Charles Daubney a short time before his death. He took great interest in the Statutory Examination and thought that there should be more candidates for the Examination.—H. D. SEARLES-WOOD.

I do not think that sufficient attention is given by the younger members of the Institute to the Statutory Examinations under the London Building Act, 1894. That Act establishes the Royal Institute of British Architects as the authority to issue certificates qualifying holders to act as District Surveyors in London. During the last two years the entrants to the examination have been very few and none has had the necessary qualifications to receive certificates.

The office of District Surveyor is the gift of the London County Council, who expect candidates for vacant appointments to hold the Royal Institute of British Architects Certificate. It may be that the lack of interest in these examinations is caused by an ignorance of the character of the office of District Surveyor, and of the duties, privileges and remuneration attaching thereto.

The office of District Surveyor has a very honourable tradition. It at least extends back to the time of the reconstruction of the City of London after the great fire of 1666. Prior to that there were officers in charge of buildings in the City, but by an Act of Parliament giving definite rules for the rebuilding there were established "Surveyors" whose duties form the basis of much which obtains to-day. Various Acts for developing the scope of control have since been passed by Parliament, and the original area included in the original Rebuilding Act has now been extended to the borders of the London County Council area.

The title of "Surveyor" was definitely changed to "District Surveyor" in an Act passed in the eighteenth century.

The office is a Statutory one—that is the District Surveyor obtains his authority to perform his duties direct from Act of Parliament. He has, therefore, a very large measure of independent action and he is personally responsible for the decisions he may come to. He has to enforce the rules of the Acts of Parliament which he is interested in and when necessary must himself take the necessary steps by prosecution in the Courts to secure compliance. He has the great privilege of becoming a friendly guide to architects and builders who often find it difficult to understand the full scope of the Building Acts. Notice of all building work in his District must be given to him, and he must survey the work as necessary to see that it is properly carried out. Various other duties in connection with the lay-out of streets, width of way, height and size of buildings, &c., must also be attended to.

He has to establish his own office and staff in his District and can make what suitable arrangements he chooses for carrying on his work. He meets the expenses of his office and all other outgoings.

In order that he may secure advice and guidance in his work there is in existence the District Surveyors' Association, which meets once a month, and is composed solely of existing District Surveyors.

He is debarred from engaging in private practice. During holidays, illness, &c., he may nominate as his *locum tenens* another certified surveyor.

His remuneration is derived from fees which are his personal property and which are fixed by Act of Parliament and are payable on each new building when roofed in or at the completion of each service when rendered. The amount of a fee usually varies according to the size of the building. The total remuneration depends, therefore, upon the amount of building work carried out in his district. As an illustration of the value of some districts, the London County Council have recently appointed two new District Surveyors, one to a central London District,

and one a suburban District; the gross incomes from these two districts last year were approximately £2,500 and £2,200 respectively.

The London County Council usually expect from candidates, in addition to the possession of the Statutory Certificate of competency to act as a District Surveyor, a practical knowledge of building work and some knowledge of the actual work of a District Surveyor's office. This latter experience can, of course, only be obtained in an existing office. There is usually an opportunity of acting as an assistant to a District Surveyor and possibly of acting as his *locum tenens*. The number of District Surveyors in London range between thirty and forty. Vacancies occur from time to time.

Any of the District Surveyors would be willing to advise an intending candidate.

The next examination for candidates wishing to obtain the Statutory Certificate will be held in October 1926, and full particulars can be obtained from the Secretary, Royal Institute of British Architects, 9 Conduit Street, W.1.

CHAS. A. DAUBNEY [*F.*].

Allied Societies

BERKS, BUCKS AND OXON ARCHITECTURAL ASSOCIATION.

The fourth annual dinner of the Association was held at the Central Café, Reading, on 27 January, Mr. H. S. Rogers, M.A., F.S.A., F.R.I.B.A., presiding. The guests included the Vice-Chancellor of Oxford, the Principal of Reading University College, Major Barnes, V.P. R.I.B.A., Mr. MacAlister, Secretary R.I.B.A., the President of the S. Wales Institute of Architects, the Vice-President of the Hants and Isle of Wight Association of Architects (Mr. J. Arthur Smith), the President of the Southern Counties Federation of Building Trades Employers.

Mr. J. Wells, Vice-Chancellor of Oxford University, in proposing "The Town of Reading and its University," spoke of the close connection between Oxford and Reading and congratulated the town in that it was shortly to have a University. He considered that the College set an excellent example in several points of development. He wished architects would persuade people that an old building that was serving its purpose should never be destroyed because it was out of date.

Mr. Councillor W. R. Howell in response spoke of the Reading Corporation work in the construction of bridges; modern traffic making it necessary for existing bridges in the town to be widened. Mr. W. M. Childs (Principal of Reading University College), who also responded to the toast, paid eloquent tribute to Mr. J. Wells's work for the College. When they received their charter they would be a University legally and in name and as a University they intended to maintain their standard of efficiency.

Mr. E. P. Warren (Past President of the Association), proposing "The Royal Institute of British Architects," said how gratifying it was that architecture was becoming a prominent feature of the life of the country.

Major Harry Barnes, in responding, touched on the educational work of the Institute, and on its co-operation with allied societies. Mr. C. F. Ward (President of the the South Wales Institute of Architects), replying for the Allied Societies, urged that all members of Allied Societies should belong to the Royal Institute.

Mr. Ian MacAlister (Secretary of the R.I.B.A.) gave the toast of "The Berks, Bucks and Oxon Architectural Association." He paid tribute to the past and present officers as examples of energy and loyalty to the Institute.

Mr. H. S. Rogers, in response, said they realised the geographical difficulties of the three counties and would have seriously to consider the position in the near future.

Replying to the toast "Our Guests," given by Mr. R. A. Rix, Mr. C. P. Lovell (President Southern Counties Federation of Building Trades Employers) emphasised the great need for co-operation between architects and builders.

THE NORFOLK AND NORWICH ASSOCIATION OF ARCHITECTS.

ABSTRACT FROM THE REPORT OF THE COUNCIL FOR THE YEAR 1925.

The Council have pleasure in submitting to you the Fourth Annual Report of the Association.

The usual competition open to Associate Members was held, prizes being offered for measured drawings and sketches. Seven sets of drawings were received. Prizes were awarded as follows:—

E. C. Scott—1st prize.
C. J. Messent—2nd prize.
J. R. Palmer—Special Junior prize.

Your representatives in the Council of the Norwich Society have again devoted much time to the work of that Society, especially in connection with Elm Hill. A report was prepared after very careful study of the properties, and was in due course considered by the Norwich City Council. Elm Hill is unique in Norwich, if not in the Eastern Counties, and no trouble or time have been spared in the endeavour to save it. The city authorities have not yet decided on its preservation, and the issue hangs in the balance.

Arising out of this and other cases, the City Council have appointed an Ancient Buildings Committee which includes two architects, members of the Council of the Norwich Society. This committee has already done good work, and will undoubtedly prove of great value both in watching over the older architectural treasures of the city, and also in providing a clearing house for the ideas of the Preservationists on the one hand and the Iconoclasts on the other, who have each, perhaps, in the past too little appreciated the others' point of view.

The Council has been occupied with many other matters during the year, including architectural education and the discouragement of unqualified practitioners. An immense amount of architectural work is still being done by builders, sanitary inspectors and other untrained persons, and this is unfortunately being encouraged under the Government Housing Scheme. Your Council conceive it to be one of the important functions of such Associations as this to do what can be done, in the present state of the laws, to protect the public in this matter.

The following were elected officers and members of Council for 1926:—

President—E. T. Boardman, F.R.I.B.A.
Vice-Presidents—S. J. Wearing, A.R.I.B.A., J. Page, B.A., A.R.I.B.A.
Hon. Secretary—E. W. B. Scott, A.R.I.B.A.

Council Members—E. H. Buckingham, A.R.I.B.A., C. Upcher, J. Owen Bond, L.R.I.B.A.
Associate Member of Council—C. L. Lister.
Honorary Auditor—E. J. Tench, F.R.I.B.A.

THE SOUTH WALES INSTITUTE OF ARCHITECTS.

CENTRAL BRANCH.

A very successful new venture in the nature of a smoking concert was organised recently by the South Wales Institute of Architects (Central Branch), and held at Cardiff.

The special object of this meeting was the provision of a means of social intercourse for the members, particularly those of the Associate and Student Classes. Mr. T. Alwyn Lloyd (Chairman of the Branch) presided, and the company included Mr. C. F. Ward (Newport), President of the South Wales Institute; Mr. and Mrs. Ivor P. Jones, Mr. and Mrs. Percy Thomas, Mr. H. Teather, Mrs. T. Alwyn Lloyd, Mr. W. S. Purchon, Mr. R. H. Winder, Mr. and Mrs. A. G. Edwards (Bridgend), Mr. W. D. Thomas (Perth), Mr. and Mrs. Williamson.

The evening was so highly appreciated that it has been decided to hold similar gatherings in the future.

On Thursday, 4 February, the third of this session's series of lectures organised jointly by the South Wales Institute of Architects (Central Branch) and the Institute of Builders (South Wales Branch), was given by Mr. J. E. Barton, M.A., of Bristol. This lecture, entitled "Gothic Craftsmanship," and illustrated by a fine collection of lantern slides, was very well attended by members of both the Institute and the general public. Mr. Barton has for many years made a study of mediæval architecture.

Obituary

CHARLES HERBERT ASHWORTH, F.R.I.B.A., F.R.I.A.I., M.I.C.E.I.

Mr. Ashworth, who died recently, was a native of Liverpool, and went to Dublin at the age of about 23 to take up a position as assistant in the office of the late Sir Thomas Deane. While with him Mr. Ashworth was engaged on the drawings of the National Museum and also acted as the clerk of works during the erection of the buildings till their completion. He was later appointed architect to the Dublin Artisans' Dwellings Company, to the duties of which office he devoted the greater part of his attention. In addition to this work Mr. Ashworth had an extensive practice in Dublin and carried out many important works. These included branch offices for the Royal Bank of Ireland, the Provincial Bank of Ireland, Bank of Ireland Stephens Green, new bakeries for Mr. Peter Kennedy, new flour mills, housing schemes, new factory and houses for Messrs. John Player and Sons, large drapery establishment and numerous commercial buildings, new warehouses for Messrs. Hugh Moore and Alexander. He was also architect to the two principal theatres, the Theatre Royal and the Gaiety Theatre.

Mr. Ashworth served for some time on the Council of the Royal Institute of Architects of Ireland.

At the beginning of 1925 he took into partnership Mr. J. Bramwell Smith, M.R.I.A.I., and the practice was carried on as Ashworth and Smith. Mr. Smith is carrying on the practice under the old name of Ashworth and Smith at the same address, 12 and 13, South William Street, Dublin.

WALTER BRYAN WOOD [*A.*].

Mr. Wood, a well-known Gloucester architect, died on 28 January, at the age of seventy-four.

Mr. Wood was a native of Lancashire, but came to Gloucestershire in the days of his youth, when his father was medical officer at a private hospital at Dowdeswell. He entered the office of Messrs. Waller and Son, architects, Gloucester, as a pupil, and subsequently became junior partner in 1882, leaving the firm in 1888.

He commenced business on his own account at 12, Queen Street, in January 1889, and built up what proved a most successful practice. Amongst the many buildings in the city and district which were built to plan submitted by him were the offices in Eastgate Street of the Gloucester Gas Light and Coke Co.; St. Andrew's Church, Churchdown; the Girls' High School, Denmark Road; Calton Road Council School; the new Council School now in course of completion at Kingsholm; St. Catharine's Church; Stroud General Hospital; offices and factory for Messrs. Foster Brothers at the Gloucester Oil Mills; buildings for Messrs. Sessions and Sons at the Docks; offices of the Gloucester Conservative Benefit Society in Bell Lane; offices for Messrs. Price Walker and Co. in Bristol Road; offices for the Stroud Brewery Co., at Stroud; and malt houses for Messrs. G. and W. E. Downing at the Docks. He was elected an Associate of the Royal Institute of British Architects in 1881.

Mr. Wood occupied a prominent position in the social and parochial life of Gloucester.

INSTITUTE OF PUBLIC ADMINISTRATION.

A Paper will be read by Mr. G. Topham Forrest [*F.*] (Architect, L.C.C.), entitled "London One Hundred Years Hence" (illustrated by lantern slides), at Montagu House, Whitehall, S.W.1 (Headquarters of the Ministry of Labour), in Conference Room No. 9, on Thursday, 25 February 1926, at 6 p.m. Chairman, Sir O. E. Warburg, O.B.E. Admission to non-members is by invitation. All enquiries should be addressed to the Hon. Secretary, I.P.A., Palace Chambers, Bridge Street, S.W.1.

CAIRO POLYTECHNIC SCHOOL.

Mr. William W. Wood [*A.*] has been appointed Assistant Professor of Architectural Design at the Cairo Polytechnic School.

A.B.S. SCHEME OF INSURANCE.

The A.B.S. specialises in Life Assurance. In Whole Life Assurance the sum assured and bonus are payable at death and the payment of premiums normally continues throughout life. The bonuses which are usually payable with the sum assured may be surrendered for cash, applied to the reduction of future premiums or used to reduce the period over which premiums are payable. The Society is not tied to any insurance office and is prepared to offer and advise upon a wide choice of policies in leading companies. Half the initial commission is returned to the assured in the form of rebate and the other half forms a direct contribution to the Society's funds.

Please address all enquiries to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.1. Telephone: Mayfair 434.

AMERICAN INSTITUTE OF ARCHITECTS' 59TH CONVENTION.

Mr. E. Guy Dawber, President, has received the following letter from Mr. D. Everett Waid, President of the American Institute of Architects :

DEAR MR. DAWBER,—The 59th Convention of the American Institute of Architects will occur in Washington, D.C., 5, 6, and 7 May 1926. We should like all members of the Royal Institute of British Architects to know that they will be as welcome to attend as our own members. Any of your members who may find it possible to be present will receive further information if they will kindly send their addresses to our Secretary, The Octagon House, Washington, D.C.

You, Mr. President, will be thrice welcome if you can pay us a visit.

With high esteem, believe me,

Faithfully yours,

D. EVERETT WAID,

President, A.I.A.

At the annual general meeting of the British Academy of Arts in Rome, Mr. E. Guy Dawber, President of the R.I.B.A., was elected an honorary member of the Academy.

EXHIBITION OF GARDEN DESIGNS.

It is proposed to arrange an exhibition of drawings, prints, plans and photographs illustrative of garden design in the R.I.B.A. Galleries during April 1926. It is hoped that the exhibition will include designs of gardens, both old and modern, public and private, British and Continental.

The exhibition will run from 7 to 21 April 1926, and a lecture on " Garden Design " will be given by Mr. F. Inigo Thomas, F.S.A. on the 14 April at 5 p.m.

Members of the R.I.B.A. who have in their possession prints, photographs and drawings (measured or otherwise) which are suitable for this exhibition are invited to send them in for the consideration of the Selection Committee. The following conditions should be carefully noted :—

1. The exhibition is intended primarily to be one of garden design and planning, but illustrations of garden architecture and ornaments such as orangeries, pergolas, and statuary, may be submitted if desired.
2. Exhibits should be in reasonable good condition for exhibition purposes.
3. Photographs should be as large as possible (unless they are submitted merely to illustrate a plan) and should be mounted. They need not be framed.
4. All exhibits should be clearly marked with their title and the owner's name and address.
5. Exhibits must be addressed to the Secretary R.I.B.A., *and must be received by him not later than* 20 *March* 1926.
6. All exhibits will be insured against all risks while in the possession of the R.I.B.A.

PROFESSOR RAGNAR ÖSTBERG.

Professor Ostberg, whose name will be submitted to H.M. the King for the Royal Gold Medal, well known for his most famous building, the Town Hall at Stockholm, attended the International Congress on Architectural Education in the summer of 1924, when many of his English confrères had the pleasure of meeting him. Among his other works in Sweden are the Östermalm School, Stockholm, the Odd-Fellows House, Kyköping, the Patent Works, and numerous private houses, Stockholm. He has been a professor at the Royal Academy of Arts, Stockholm, since 1922.

THE BRITISH SCHOOL AT ROME.

FACULTY OF ARCHÆOLOGY, HISTORY AND LETTERS. APPEAL FOR ADDITIONAL SUBSCRIBERS.

The following letter has been addressed to present subscribers to the school and to societies who are interested in its objects :—

50 *Bedford Square,*
London, W.C.1.

DEAR SIR OR MADAM,—Twenty-five years have elapsed since the Faculty made a general appeal for funds, and the body of subscribers has been reduced to a point which makes a serious effort necessary. At present the subscription list contains nearly 200 names, including Universities and Colleges, and it is hoped that the supporters of the Faculty will do what they can to assist us in our endeavour to add to their number.

We invite you therefore to send to the hon. treasurer, 50 Bedford Square, London, W.C.1, on a postcard, the names and addresses of persons known to be interested in archæology, history and letters, or in any of the arts studied at the British School at Rome, who might be asked to subscribe to the Faculty or give it financial aid. It is hardly necessary to add that a yet more effective form of help would be to canvass such persons and to inform the treasurer that their help had already been secured or promised. There is no question that a personal canvass is worth many written appeals.

We are, yours faithfully,

ARTHUR HAMILTON SMITH, *Chairman.*
W RUSSELL, *Hon. Treasurer.*

ROME SCHOLARSHIP IN ARCHITECTURE 1926.

The Faculty of Architecture of the British School at Rome have selected the following candidates to take part in the Final Competition for the Rome Scholarship and Henry Jarvis Studentship of 1926, offered by the Commissioners of 1851 and the Royal Institute of British Architects respectively :

E. M. K. Ellerton, Architectural Association.
K. E. F. Gardiner, Architectural Association.
J. B. Wride, Cardiff Technical College.
H. G. C. Spencely, Liverpool University.
H. Thearle, Liverpool University.
T. T. Wills, Liverpool University.
J. R. Alabaster, London University.
A. D. Connell, London University Atelier.
B. R. Ward, London University Atelier.

Notices

THE NINTH GENERAL MEETING.

The Ninth General Meeting (Ordinary) of the Session 1925–26 will be held on Monday, 1 March 1926, at 8 p.m., for the following purposes :—

To read the Minutes of the General Meeting (Business) held on 15 February 1926 ; formally to admit members attending for the first time since their election or transfer.

To read the following paper : " The Paris Exhibition of 1925," by Lt.-Col. H. W. G. Cole, C.S.I., O.B.E.

R.I.B.A. SESSIONAL PAPERS.

Members are requested to note that at the General Meeting on Monday, 15 March 1926, at 8 p.m., Mr. George H. Duckworth, C.B., F.S.A., will deliver a lecture entitled " The Making of a Slum."

EXHIBITION OF ARCHITECTS' WORKING DRAWINGS.

An Exhibition of Architects' Working Drawings will be held in the R.I.B.A. Galleries from Tuesday, 16th February, to Saturday, 27th February 1926.

The Exhibition will be open daily between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.) and will include drawings lent by—

Mr. Thomas Hastings and Professor C. H. Reilly (Devonshire House).

Messrs. Hennell and James
(A house at Hampstead Garden Suburb)

Mr. L. Sylvester Sullivan
(Building for Courtaulds, Ltd.).

The Exhibition is intended primarily for students of Architecture ; they will be able to examine the drawings that a practising architect hands to a contractor, and thus will be afforded an insight into the methods adopted in a modern architect's office.

A Special Students' Evening will be held at the Exhibition on Tuesday, 23rd February, 1926, at 8 p.m. All students are cordially invited to attend. It is hoped that the architects who have lent the exhibits—or their representatives—will be present in order to explain the drawings to students. Refreshments will be provided and no cards of admission are required.

ELECTION OF MEMBERS.

29 MARCH 1926.

An election of members will take place at the Business General Meeting on 29 March 1926. The names and addresses of the candidates (with the names of their proposers) found by the Council to be eligible and qualified for membership according to the charter and bye-laws, and recommended by them for election, are as follows :—

AS FELLOWS (10)

LIVOCK : STANLEY GAGE [*A.* 1910], 22 Surrey Street, Strand, W.C.2, and at Norwich ; Meadway, Horsell Rise, Woking. Proposed by Herbert Wigglesworth, David Barclay Niven, Professor S. D. Adshead.

MILBURN : STANLEY WAYMAN, M.C. [*A.* 1913], 19 Fawcett Street, Sunderland ; 4 Ashmore Terrace, Sunderland. proposed by R. Burns Dick, Jas. T. Cackett, W. T. Jones.

MILBURN : WILLIAM, JUNR., B.Sc., F.S.I. [*A.* 1910], 19 Fawcett Street, Sunderland ; 23 Valebrooke Avenue, Sunderland. Proposed by R. Burns Dick, Jas. T. Cackett, W. T. Jones.

MOORE : MAJOR FREDERICK WILLIAM, D.S.O., M.C. [*A.* 1912], Queensgate Chambers, Bradford, and Station Buildings, Keighley ; Hillside, Riddlesden, Keighley. Proposed by Wm. Illingworth, W. J. Morley, Eric Morley.

PHILLIPS : REES [*A.* 1913], 9 Bentinck Street, Manchester Square, W.1 ; 84 Hamilton Terrace, N.W.8. Proposed by A. Saxon Snell, H. P. G. Maule, Bernard Dicksee.

And the following Licentiates, who are qualified under Section IV, Clause C (ii) of the Supplemental Charter of 1925 :—

BECKWITH : HENRY LANGTON, F.S.I., 3 Cook Street, Liverpool ; Sandown Park, Wavertree, Liverpool. Proposed by W. Glen Dobie, E. Percy Hinde, E. Bertram Kirby.

CHADWICK : MAJOR JOHN, T.D., Bletchley, Bucks. Proposed by Walter Butler Stonebridge, Laurence K. Hall and the Council.

FAUNCH : FREDERICK GEORGE, 76 Cranbrook Road, Ilford, Essex. Proposed by the Council.

WADDINGTON : FREDERICK TURNER, 52 Abingdon Street, Blackpool ; 127 Hornby Road, Blackpool. Proposed by William B. Walton, R. H. Cunliffe, Major Halstead Best.

WALSH : JOSEPH FREDERICK, F.S.I., 10 Harrison Road, Halifax ; Savile Green, Halifax. Proposed by E. Marshall Wood, W. J. Morley, Eric Morley.

AS ASSOCIATES (33)

BLIZZARD : HENRY GEORGE [Special], 8 Elmwood, Welwyn Garden City, Herts. Proposed by H. C. Lander, Louis de Soissons, Arthur Wm. Kenyon.

BROOKFIELD : GEORGE PIERS, B.Litt.Oxon., B.Sc. (in Architecture), of the Massachusetts Institute of Technology [Exempted from Final Examination], 19 Rue de Lille, Paris, France. Proposed by Frank T. Verity, Sir Aston Webb, Maurice E. Webb.

BURTON : JOHN [Special], 71 West Parade, Mount Pleasant, Stoke-on-Trent. Proposed by Elijah Jones and the Council.

CASTELLINO : SYLVESTER JOSEPH TRINITY D'SOUZA [Special], c/o Messrs. J. A. Castellino & Co., 328 Sachapeer Street, Poona, India. Proposed by Professor A. E. Richardson, Arthur Stratton, Walter R. Jaggard.

COOMBES : ROBERT EDWIN MONTAGUE [Final], Cathedral School, Llandaff, Cardiff. Proposed by Percy Thomas, T. Alwyn Lloyd, Harry Teather.

COOPER : WILLIAM REGINALD ROYDON [Special], 17 New Street, Shrewsbury. Proposed by the Council.

CURRIE : MURDOCH [Passed five years' course at Glasgow School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 250 Paisley Road W., Glasgow. Proposed by Geo. And. Paterson, John Stewart, Colin Sinclair.

DANN : CLIFFORD HORACE [Final], 66 Trinity Street, Norwich. Proposed by Edw. T. Boardman, Grahame Cotman, George J. Skipper.

DOYLE : STANLEY HODGSON [Special], Calverley Chambers, Victoria Square, Leeds. Proposed by W. Carby Hall, Fred Broadbent, James Parish.

GRAY : CHARLES CLARE [Final], 81 Sutton Crescent, Walsall. Proposed by F. E. F. Bailey, A. T. Butler and the Council.

GREEN : CHRISTOPHER, B.A.Oxon. [Final], 83 Gunterstone Road, Baron's Court, W.14. Proposed by W. Curtis Green, E. Guy Dawber, Howard Robertson.

GREEN : RALSTON TILSLEY [Final], 11 Dents Road, Wandsworth Common, S.W.11. Proposed by Sir George H. Oatley, C. E. Varndell, G. C. Lawrence.

HARLEY : THOMAS [Final], 15 Dewar Street, Dunfermline. Proposed by P. D. Hepworth, J. Ernest Franck, Sir Giles Gilbert Scott.

KEMP : CECIL GEORGE [Special], Bridge Road, Welwyn Garden City, Herts. Proposed by H. Clapham Lander, Louis de Soissons, Arthur Wm. Kenyon.

KIMBER : CHARLES FRANK, M.C. [Special], 39 Head Street, Colchester. Proposed by Alexr. G. Bond and the Council.

LIPSON : SAMUEL [Final], c o James Miller, Esq., A.R.S.A., 15 Blythswood Square, Glasgow. Proposed by John Keppie, John Watson, James Miller.

MCKEWAN : ARTHUR MALCOLM [Final], 27 Somerset Road, Handsworth Wood, Birmingham. Proposed by Herbert T. Buckland, William Haywood, James A. Swan.

MESSENT : CLAUDE JOHN WILSON [Final], 34 Mile End Road, Norwich. Proposed by George J. Skipper, Edwin J. Tench, Edw. T. Boardman.

MOORE : JOHN ROBERT [Special], 13 Acland Road, Willesden Green, N.W.2. Proposed by P. H. Thoms, J. Donald Mills, Thos. M. Cappon.

PALMER : PHILIP EVANS [Special], 25 Royal Avenue, Chelsea, S.W.3. Proposed by Edward Maufe, Austin Durst, Leslie T. Moore.

PARAMOR : FRANK WILLIAM [Final], " Hillsborough," Selsdon Village, Sanderstead, Surrey. Proposed by Professor A. E. Richardson, C. Lovett Gill, Henry C. Smart.

PASHEN : JOHN HERBERT [Special], " Ujiji," Dorchester Road, Weymouth. Proposed by C. E. Varndell and the Council.

PATKER : PURUSHOTTAM MUKUND [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Harvey Road, Gamdevi, Bombay, India. Proposed by Professor A. E. Richardson, C. Lovett Gill, W. R. Jaggard.

POUSHKINE : BARBARA [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 52 Lancaster Gate, W.2. Proposed by Walter Cave and the Council.

ROWSE : ERIC ANTHONY AMBROSE [Special], Flat 4, St. Stephen's House, St. Stephen's Square, Bayswater, W. Proposed by H. Lionel Thornely, Stanley Hamp, Charles E. Varndell.

SIMPSON : DOUGLAS JAMES [Final], 51 Downs Park West, Bristol. Proposed by Sir George H. Oatley, Alfred J. Taylor, G. C. Lawrence.

THOMAS : BRYAN WILLIAM RYLANDS [Passed five years' course at Cardiff Technical College. Exempted from Final Examination after passing Examination in Professional Practice], Briar Dene, North Road, Cardiff. Proposed by T. Alwyn Lloyd, Percy Thomas, Harry Teather.

VINE : RONALD OWEN [Final], 7 Whymark Avenue, Wood Green, N.22. Proposed by John P. Briggs, C. Stanley Peach, Harry C. H. Monson.

WATSON : EDWIN [Final], 86 Orchard Road, Erdington, Birmingham. Proposed by Edwin F. Reynolds, Herbert T. Buckland, George Drysdale.

WELSH : OLIVER MARTIN [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 38 Pattison Road, N.W.2. Proposed by Professor A. E. Richardson, C. Lovett Gill, Arthur Stratton.

WILDE : GEORGE [Final], 171 Park Road, Bolton. Proposed by John Bradshaw Gass, Arthur John Hope, Fred Thorpe.

WILFORD : CHARLES EDMUND [Special], " Wychwood," Taunton Road, Leicester. Proposed by George Nott, Frank H. Jones, Arthur Wakerley.

WINTER : PERCY HAROLD, P.A.S.I. [Special], 25 Pollards Wood Road, S.W.16. Proposed by Alfred Cox, Percy C. Boddy, Harold G. Cherry.

AS HON. ASSOCIATE (1)

BATSFORD : HARRY, " Hedge Bank," 25 Russell Gardens, Golders Green, N.W.11. Proposed by the Council.

AMENDMENTS OF THE BYE-LAWS OF THE R.I.B.A.

By an Order of the Lords of His Majesty's Privy Council dated 5 February 1926, the following amendments to Bye-law 25 were approved :—

Bye-law 25 to be amended as follows :—

" 25. Any charge under the preceding Bye-law 24 must be preferred in writing and signed and forwarded to the secretary, who shall lay it before the . . .," etc., as printed down to " . . . such record and publication."

" During the period of suspension the member shall not be entitled to use the title ' Chartered Architect ' or the affix of the class to which he belongs, nor shall he be entitled to the use of the Library, attendance at Institute meetings or right of voting, and his name shall not be printed in the list of members in the *Kalendar* during the period of his suspension and he shall return his Diploma for such period. Before any member so suspended is reinstated the Council shall consider any further complaints as to his professional conduct during his period of suspension, and if not deemed satisfactory may decree a further period of suspension or his expulsion ; in either case the above procedure of announcement and publication shall again be followed."

" Provided always . . .," etc., to end of Bye-law as printed.

LICENTIATES AND THE FELLOWSHIP.

An examination of Licentiates desirous of qualifying for candidature as Fellows will take place on 13, 14, 15 and 16 April 1926. Application forms, to be obtained at the Secretary's Office, R.I.B.A., must be sent in on or before Saturday, 6 March, accompanied by the necessary drawings and photographs.

R.I.B.A. REGISTRATION COMMITTEE.

Meetings of the R.I.B.A. Registration Committee are now being held at No. 28 Bedford Square, London, W.C.1, the premises lately occupied by the Society of Architects. All communications in connection with the committee should be addressed to Mr. C. McArthur Butler, Secretary to the Registration Committee, at that address.

R.I.B.A. SESSIONAL PAPERS.

On Monday, 15 March, at 8 p.m., Mr. George H. Duckworth, C.B., F.S.A., will deliver a lecture entitled " The Making of a Slum."

R.I.B.A. PAMPHLET ON "THE ARCHITECT AND HIS WORK."

The pamphlet on "The Architect and His Work," compiled by the Practice Standing Committee with the assistance of the late Mr. Paul Waterhouse, Past President, has been issued by the Council with a view to bringing before the general public the functions of an architect and his use to the community.

Members can obtain copies of the pamphlet for circulation to their friends on application to the Secretary, at a cost of 2s. 6d. per dozen.

ADVERTISEMENTS IN THE R.I.B.A. JOURNAL.

The attention of all members of the R.I.B.A. is specially called to the importance of taking every legitimate opportunity of enhancing the advertising value of the R.I.B.A. JOURNAL. An increase in the income derived from such advertisements is a help to the financial position of the R.I.B.A. and an advantage to all its members. The circulation of the JOURNAL is world-wide, and going, as it does, to more than 6,000 architects in almost every part of the Empire, its potential value as an advertising medium is unequalled.

Competitions

PROPOSED ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER.

The Doncaster Town Council invite architects to submit designs in competition for the Isolation Hospital for Infectious Diseases, proposed to be erected on a site off Tickhill Road and Common Lane, Doncaster. Architects competing must be established in private practice. Assessor, Mr. T. R. Milburn [*F.*]. Last day for questions 8 March, 1926. Designs to be sent in not later than 10 May, 1926. Premiums, £200, £100 and £75. Conditions may be obtained from the Town Clerk, Town Clerk's Office, Doncaster, by depositing £1 1s.

COMPETITION FOR NEW OFFICES, WEST BROMWICH.

New offices for the West Bromwich Permanent Benefit Building Society. Open to architects practising within 15 miles of Birmingham. Assessor, Mr. W. Alexander Harvey [*F.*]. Premiums, £100, £75 and £50. Last day for designs 31 March, 1926. Conditions may be obtained from Mr. John Garbett, the Secretary, West Bromwich Permanent Benefit Building Society, 301 High Street, West Bromwich.

DOWNHAM MARKET U.D.C. HOUSING SCHEME AND SCHEME FOR BUILDING LARGE RESIDENCES: CAIRO.

The Competitions Committee desire to call the attention of Members to the fact that the conditions of the above competitions are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members are advised to take no part in the competitions.

MANCHESTER TOWN HALL EXTENSION.

The President of the Royal Institute of British Architects has appointed Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A., to act as a Jury of Assessors in connection with this competition.

TOPSHAM PUBLIC HALL COMPETITION.

Premiums of £50, £40 and £30 respectively are offered in the above competition. Assessor, Mr. Walter Cave [*F.*] Last day for questions, 1 January 1926. Designs to be sent in by 1 April 1926. Conditions may be obtained from the Clerk to the Parish Council, Topsham, by depositing £1 1s.

RECONSTRUCTION OF THE MOSQUE OF AMROU COMPETITION, CAIRO.

Members of the Royal Institute who are considering taking part in the above competition are strongly recommended to consult the Secretary R.I.B.A. before deciding to compete.

LEAGUE OF NATIONS.

COMPETITION FOR THE SELECTION OF A PLAN WITH A VIEW TO THE CONSTRUCTION OF A CONFERENCE HALL FOR THE LEAGUE OF NATIONS AT GENEVA.

The League of Nations will shortly hold a competition for the selection of a plan with a view to the construction of a Conference Hall at Geneva. The competition will be open to architects who are nationals of States Members of the League of Nations.

An International Jury consisting of well-known architects will examine the plans submitted and decide their order of merit.

A sum of 100,000 Swiss francs will be placed at the disposal of the Jury to be divided among the architects submitting the best plans.

A programme of the competition when ready will be despatched from Geneva, and Governments and competitors will receive their copies at the same time. Copies for distant countries will be despatched first.

The British Government will receive a certain number of free copies. These will be deposited at the Royal Institute of British Architects, and application should be made to the Secretary, R.I.B.A., 9 Conduit Street, W.1, by intending competitors.

Single copies can be procured direct from The Secretary-General of the League of Nations at Geneva, for the sum of 20 Swiss francs, payable in advance, but will not be forwarded until after the Government copies have been despatched.

On the nomination of the President of the Royal Institute, Sir John Burnet, A.R.A., has been appointed as the British representative on the Jury of Assessors.

AUSTRALIAN WAR MEMORIAL—CANBERRA.

Competitive designs are invited for the Australian War Memorial at Canberra.

The competition is open to architects of Australian birth, wherever located, and in order that competitors

who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until 15 August, at which date they will be available at the office of the High Commissioner, Australia House, Strand.

To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on 31 March 1926, up to noon, on which date designs from architects in Europe will be received at the office of the High Commissioner in London.

Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

Members' Column

PARTNERSHIP WANTED.

F.R.I.B.A., young and active, desires to meet established Architect with good practice. Can place capital if required. Would be willing to accept post for a period, prior to partnership. —Apply Box 1126, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

JUNIOR PARTNERSHIP WANTED.

Associate, 32, with over ten years' first-class London experience, five years chief assistant, wishes to purchase junior partnership in busy office.—Apply Box 169, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

CHANGE OF ADDRESS.

Mr. H. Oliver [*L.*] has changed his address from No. 9 Staple Inn, to No. 4 Verulam Buildings, Gray's Inn, where he has established his office in conjunction with Mr. William G. Ingram [*F.*].

OFFICE TO LET.

F.R.I.B.A. offers large light office in W.C.2 district. Rent £75 per annum inclusive. Would also consider use of drawing office, telephone, etc.—Box 1026, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

APPOINTMENT VACANT.

Good all-round architectural assistant required for service in Shanghai (preferably an A.R.I.B.A.), age not exceeding 28 years, unmarried. Knowledge of quantities not essential. Three years' agreement. Salary Taels 350 per month, rising to Taels 450 (approximately £600 to £800 per annum).—Apply Box 1626, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

PARTNERSHIP WANTED.

A.R.I.B.A. with good all-round experience, at present holding responsible position, seeks a junior partnership (with prospects), with a well-established architect.—Apply Box 1229, c/o Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

OFFICE ACCOMMODATION.

A.R.I.B.A., etc., with small practice and West End office, having more work than he can cope with personally, wishes to meet another with a view to sharing his own or another office on mutual terms.—Apply Box 1526, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

Minutes VIII

At the Eighth General Meeting (Business) of the Session 1925–1926, held on Monday, 15 February 1926, Sir Banister F. Fletcher [*F.*], Vice-President, in the chair. The attendance book was signed by 20 Fellows (including 11 Member of the Council), 5 Associates (including 3 Members of the Council), and 3 Licentiates.

The Minutes of the meeting held on 1 February 1926, having been taken as read, were confirmed and signed by the Chairman.

The Hon. Secretary announced the decease of :

Mr. Harry Phibbs, Elected Associate 1907.

Mr. Henry Chapman, Elected Associate 1902.

And it was Resolved that the regrets of the Royal Institute for the loss of these members be recorded in the Minutes.

The following member attending for the first time since his election was formally admitted by the Chairman :

Mr. Harold Guy Holt [*F.*].

The following candidates for membership were elected by show of hands :

AS FELLOWS (20).

Allcock : Edward Thomas [*A.* 1896], Loughborough.

Fread : Horace Charles [*A.* 1905], Esher.

Gold : Hugh Andrew, M.C. [*A.* 1913].

Goldsmith : Major George Hartley, M.C. [*A.* 1907], St. Omer, France.

Hampson : Joseph Louis [*A.* 1910], Blackburn.

Hughes : Thomas Harold, A.R.C.A. (Arch. London), F.S.I., F.R.G.S. [*A.* 1911], Glasgow.

Newnum : Eric George [*A.* 1910], Cairo.

Robertson : Alexander Robert [*A.* 1902].

Scott : Eric Wilfrid Boning [*A.* 1912], Norwich.

Scott : Theodore Gilbert, M.C. [*A.* 1914], Norwich.

Tait : Thomas Smith [*A.* 1913].

Taylor : Samuel Pointon [*A.* 1908].

Tetley : Charles Reginald [*A.* 1913], Montreal, Canada.

Westwood : Percy James [*A.* 1904].

And the following Licentiates, who are qualified under Section IV, Clause C (ii), of the Supplemental Charter of 1925 :—

Anderson : Arthur Ernest, Montreal, Canada.

Finlayson : William, Crieff, Perthshire.

Pritchett : Herbert Dewes, Darlington.

And the following Licentiates, who have passed the qualifying examination :—

Cleland : John Stockwin, M.B.E., Pretoria, South Africa.

Sudbury : Harry Tatham, Ilkeston.

Thraves : Alfred John, Nottingham.

AS ASSOCIATES (6).

Ali : S. Aziz [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Hyderabad, India.

Alsop : George Hatherley [Final], Melbourne, Australia.

Barnes : Thomas Scott [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Morden, Surrey.

Bhuta : Gopalji Mulji [Final], Bombay, India.

Meikle : Edyth [Passed five years' course at Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice].

Silcock : Frances Thelma [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Huyton, Liverpool.

AS HON. FELLOW (1).

Dicksee : Sir Frank, P.R.A.

AS HON. ASSOCIATE (1).

GRIGGS : FREDERICK LANDSEER MAUR, A.R.A.

The Secretary announced that the Council had nominated for election to the various classes of membership the candidates whose names are published in this issue of the JOURNAL.

The President announced that the Council proposed to submit to His Majesty the King the name of Professor Ragnar Ostberg, Hon. Corresponding Member, of Stockholm, as a fit recipient of the Royal Gold Medal for the current year.

Mr. Herbert W. Wills [*F.*] moved, and Mr. H. D. Searles-Wood [*F.*] seconded, the following Resolutions, of which due notice had been given :

" That the Regulations for the conduct of architectural competitions be amended by the adoption of one of the two following changes (*A*) or (*B*) and the addition of Clause (*C*). Details to be left to the consideration of the Competitions Committee.

" (*A*) All binding conditions should be eliminated. Instructions to competitors to take the form of suggestions which both they and the assessor may follow as they deem fit.

" (*B*) That binding conditions be retained and that in case a competitor considers they have been ignored he shall have the right to appeal to the Competitions Committee of the Institute. In doing so he shall pay an agreed deposit to the R.I.B.A., such deposit being forfeited to the R.I.B.A. if his complaint is considered by the Competitions Committee to be unfounded. If, on the other hand, they find on investigation the complaint is justified, they shall so report and the award shall be quashed, a new assessor appointed by the President who shall assess the whole of the designs sent in and to whom the assessor's fee agreed upon shall be paid.

" (*C*) Whenever architects are invited to send in applications and qualifications for selection for a limited competition, such invitation shall be advertised at least on three different dates during a period of not less than one month."

The first resolution was discussed.

The following amendment was moved by Mr. E. Stanley Hall (Hon. Secretary), seconded, and passed by 21 votes to 3 :

" (*A*) Binding conditions should be reduced to a minimum. Instructions to competitors should as far as possible take the form of suggestions, which both they and the assessors may follow as they deem fit."

The amendment was then moved as a substantive resolution, seconded, and passed by 21 votes to 3.

The second resolution was discussed, put to the vote and lost by a large majority.

The third resolution was discussed, put to the vote, and lost, only one vote being recorded in its favour.

The proceedings closed at 9.15 p.m.

NATIONAL HEALTH INSURANCE.

The Architects' and Surveyors' Approved Society.
26 Buckingham Gate, London, S.W.1.

CONTRIBUTIONS.

The contribution for men is 10d. per week, and for women 9d. per week, 5d. of which is in each case payable by the employer.

ORDINARY BENEFITS.

SICKNESS BENEFIT.—Men, after 26 contributions have been paid, 9s. weekly ; after 104 contributions have been paid, 15s. weekly. Women, after 26 contributions have been paid, 7s. 6d. weekly ; after 104 contributions have been paid, 12s. weekly.

DISABLEMENT BENEFIT.—Men and women, 7s. 6d. per week, after 104 contributions have been paid.

MATERNITY BENEFIT.—40s. after 42 contributions have been paid.

ADDITIONAL BENEFITS.

SICKNESS BENEFIT.—Payable at the increased rates of 22s. per week for men, and 19s. for women.

DISABLEMENT BENEFIT.—Increased to 11s. per week for both men and women.

MATERNITY BENEFIT.—Increased to 54s.

SPECIAL BENEFITS.—Grants made to members entitled to " additional benefits " amounting to the full cost of any optical, dental, hospital or convalescent treatment, also for glasses, surgical appliances, artificial teeth, etc. Members may choose their own institutions, nursing homes or practitioners.

Further particulars and forms of application for membership may be obtained from the undersigned.

HERBERT M. ADAMSON, *Secretary.*

VISIT TO ROME AND FLORENCE.

The Association of Architects, Surveyors and Technical Assistants is organising an excursion to Rome and Florence at Easter (1 to 14 April, inclusive). It is anticipated at present that the cost of travel and hotel accommodation, including allowance for service (" tips "), etc., will not exceed £13 15s. to £15 10s., according to the number of the party. This does not include meals *en route*, wine, sightseeing, etc. Members of the party while in Rome and Florence will be at liberty either to join the organised excursions or to ramble on their own.

This trip is primarily intended for those who would not be likely to be able to visit Rome otherwise on account of expense, but every care is being taken to ensure the comfort of the party. Any member of the Royal Institute, student or subscriber, will be welcome to join the party so long as numbers allow, and to bring his wife or members of his family with him. Immediate application for particulars should be made to Mr. Chas. McLachlan [*A.*], " Ouola," Upton Road, Bexley Heath, Kent.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

LOAN LIBRARY CATALOGUE.

A new catalogue, brought up to date, of the Loan Library has recently been compiled, and can be now obtained on application at the R.I.B.A., price 1s. 6d., postage 3d. extra.

R.I.B.A. JOURNAL.

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